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This conference was conducted to communicate the deliberations of prior conferences to those who are responsible for planning research and allocating funds in the area of the education of the disadvantaged and/or segregated. Major purposes were: (1) to improve communication between investigators working in this field; (2) to stimulate interest in the conduct of research; and (3) to assist junior investigators in related research activities. A number of post conference workshops were organized to provide short-term training sessions focused on particular problem areas, and these are reported in an appendix. The document contains the texts of seven papers of such topics as desegregation research, counseling, family and community factors in educational achievement, bio-social developmental factors, language development, early childhood intervention, and special education. A summary of the proceedings is included. (NH)

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CONFERENCE PROCEEDINGS

RESEARCH DISSEMINATION AND TRAINING CONFERENCE

June 26-27, 1967

UD 007 789

Ferkauf Graduate School of Humanities and Social Sciences
Yeshiva University●55 Fifth Avenue●New York, N. Y. 10003

This conference was held at Yeshiva University under the terms of U.S. Office of Education Contract #6-10-243 (Project on Stimulation and Development of Research Related to the Education of the Disadvantaged and/or Segregated). Dr. Edmund W. Gordon, Professor and Chairman of the Department of Educational Psychology and Guidance at Yeshiva University's Ferkauf Graduate School of Humanities and Social Sciences, is Project Director.

INTRODUCTION

Under the terms of the Project on Stimulation and Development of Research Related to the Education of the Disadvantaged and/or Segregated (U.S. Office of Education Contract #6-10-243), a series of research conferences investigated significant researchable problems in the several aspects of education for disadvantaged and/or segregated children. These aspects included desegregation and integration in the public school; language development; research models from behavioral analysis, contingency management, special education, and rehabilitation; bio-social factors in the development of disadvantaged children; developmental and educational intervention; research problems in guidance and behavioral change; and educational rehabilitation through family and community services.

In each session, conferees addressed themselves to two questions:

1. What is the status of existing knowledge on these populations?
2. What kinds of research issues ought to be concentrated upon in order to move work in this field ahead?

The several conferences had varied results. From some have come fairly extensive reviews of the status of related research. Some have resulted in useful summaries of needed research, and others have produced suggested research models and strategies. All have made contributions to the conceptualization of problem areas demanding further study.

The RESEARCH DISSEMINATION AND TRAINING CONFERENCE was conducted to communicate the products of these deliberations to persons with the responsibility for planning research activities and allocating research resources. Accordingly, it was developed primarily around summary presentations reflecting the status of existing research and research needs in the several topical areas selected for discussion at the earlier conferences. The Proceedings of the RESEARCH DISSEMINATION AND TRAINING CONFERENCE includes each of these presentations. Where appropriate, they are followed by edited transcripts of general discussion.

The three major purposes of the RESEARCH DISSEMINATION AND TRAINING CONFERENCE were: 1, improved communication between investigators working in this field; 2, stimulation of interest in the conduct of research; and, 3, assistance to junior investigators in related research activities. In response to the latter two purposes, a number of post-conference workshops were organized to provide short-term training sessions focused on particular problem areas. The appendix to the Proceedings reports what transpired in these sessions.

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GREETINGS

Dean Joseph B. Gittler
Yeshiva University

Welcome to the Ferkauf Graduate School of Humanities and Social Sciences of Yeshiva University. I hope that you will find your conference profitable and exciting.

I believe it is fitting for Yeshiva University to act as host to a conference on the disadvantaged. For the last several years, we have maintained Project Beacon, consisting of a graduate level program of instruction, research, consultation, and demonstration projects aimed at improving the education of disadvantaged children.

Our Reading and Language Arts Center is engaged in research, teaching, and dissemination of information in reading and related language arts. Curriculum research in high intensity learning with disadvantaged children and youth is currently its major focus.

The Ferkauf Graduate School operates the ERIC Information Retrieval Center on the Disadvantaged which assembles books, articles, and reports for study by persons interested in the field of compensatory education.

We have also recently established a Center for the Study of Minority Groups whose main purpose is to foster an interdisciplinary approach to generic problems of cultural and ethnic minorities.

Numerous research grants and projects and a large number of publications of our faculty have centered on minority group and disadvantaged themes.

Yeshiva University's concern in this field has covered a major part of its short history. This concern has had a moral impetus. Some of us were motivated by the moral-social principle that unless an individual is free and able to obtain the fullest education with which his society can provide him, he is being injured by that society. This moral precept is self-sufficient to men of beneficence and social spirit.

An additional base besides the ethical surrounds our preoccupation and concern with the disadvantaged. In recent years, sociologists have recognized the fact that a new order of society has emerged in the United States and some other countries. This order has often been referred to as the "mass society."

It is a fundamental characteristic of this mass society that its "masses" (population) have become incorporated into society--its central structure, government, and institutions. In the pre-mass society, the larger portion of the population tended to be unaffiliated, unintegrated, and extraneous to the energies and functions of society. They were often aliens to their own birthplace. The mass society, however, equates social citizenship with demographic membership. It espouses the idea of egalitarianism, insisting that all men possess certain irreducible dignities and rights.

None of these tendencies of mass society has attained anything like full realization. It is fitting that we turn our minds and energies to conference and study. For the comprehensive understanding of what appears a vigorous social trend toward a mass society is the only way to preclude pathological dislocations.

PROBLEMS AND DIRECTIONS FOR RESEARCH ON PUBLIC SCHOOL DESEGREGATION

Dr. Irwin Katz
University of Michigan

Public school segregation must be regarded as a national problem that is not confined to the South. The recent report, Equality of Educational Opportunity (the Coleman Report), amply documents the fact that racial isolation of pupils is still the norm in American schools.[1] The report states that in the fall of 1965, 87 percent of all Negro children in the first grade were attending predominantly Negro schools; in the twelfth grade the figure was 66 percent. According to the U.S. Commission on Civil Rights, "Racial isolation in the schools . . . is intense whether the cities are large or small, whether the proportion of Negro enrollment is large or small, whether they are located in the North or South."[2]

It is also well known that predominantly Negro schools in the North and South are generally inferior in the quality of educational services offered. For example, the U.S. Commission on Civil Rights points out that Negro students are less likely than white students to attend schools that have adequate libraries, that offer courses in subjects such as science and languages, and that are not overcrowded. Negro students are more likely than white students to have teachers with low verbal achievement, to have substitute teachers, and to have teachers who are dissatisfied with their school assignment. Given these facts, it is clear that the responsibility of the Federal government with regard to furthering public school desegregation cannot be limited to any single region of the United States.

In order to decide what types of research are most likely to contribute to the implementation of governmental policy, one must consider the basic principles and objectives of the policy. With respect to school integration, it will be assumed that, insofar as possible, change efforts should be consistent with the following propositions:

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1. The burden of adjusting to desegregation in a community should be shared as equitably as possible by all citizens, rather than being concentrated upon one segment of the total population.

2. The chief responsibility for carrying out desegregation should rest with local school officials and personnel; the changeover should not depend unduly upon the voluntary efforts of those private citizens whose constitutional rights are being violated under the status quo.

3. Since the larger goal of integration is to provide all children with adequate access to the privileges and responsibilities of society, it should be tied, wherever necessary, to a general improvement of facilities, staff, and curriculum.

4. In its famous 1954 ruling, the Supreme Court declared that school segregation was psychologically harmful to Negro children. The implication is that each additional day of forced attendance at segregated Negro schools may contribute further injury to the "hearts and minds" of these youngsters. Unnecessary delays, therefore, in bringing about change must be regarded by responsible officials as intolerable, and the goal of integration must be pursued with a sense of utmost urgency.

5. Integration involves more than just racially balanced enrollments. Principals and teachers must be responsive to the needs of those students who previously attended inferior segregated schools or who come from disadvantaged homes. The educational requirements of Negro children, however, should not be used as an excuse for setting up racially segregated classes within biracial schools.

The foregoing considerations are not intended to be exhaustive; they are mentioned merely to suggest some important empirical criteria for evaluating the adequacy of different implementation strategies. Research can provide feedback on the extent to which these and other basic principles and objectives of integration are promoted by local desegregation programs. Also, research can increase our knowledge and understanding of the factors that influence the pace of desegregation. However, it should be recognized that research on desegregation is beset by many special difficulties. Pettigrew observes that the investigator in this realm is by definition a disturber of the equilibrium of educational and political establishments and, therefore, that he can expect to encounter frequent refusals of cooperation from school systems, hidden biases in officially released data, and constraints against pursuing certain lines of inquiry.[3] Pettigrew also mentions a number of special technical difficulties encountered in efforts to evaluate the effects of different types of schooling. These have to do with matters such as the following: 1, the nonrandom assignment of students to various types of schools (e.g., middle-class Negroes are more likely to be represented in desegregated schools and neighborhoods than lower-class Negroes); 2, the nonrandom treatment of students within schools (e.g., ability grouping); 3, the high attrition in Negro samples due to dropping out of school and residential mobility; 4, the noncomparability of social class categories across racial groups; and, 5, artifactual effects in evaluation studies associated with temporary spurts of motivation and other biasing phenomena (e.g., "Hawthorne effects").

RESEARCH ON FACTORS INFLUENCING THE PACE OF DESEGREGATION

In attempting to assess factors that influence the speed with which desegregation takes place in various localities, one must recognize the complexity of the causes of racial imbalance. On this point, the 1967 report of the U. S. Commission on Civil Rights states:

> . . . [Racial imbalance] has its roots in racial discrimination that has been sanctioned and even encouraged by government at all levels. It is perpetuated by the effects of past segregation and racial isolation. It is reinforced by demographic, fiscal, and educational changes taking place in the Nation's metropolitan areas. And it has been compounded by the policies and practices of urban school systems.[4]

Writing about conditions that affect the pace of desegregation, Pettigrew stresses the importance of Negro insistence, white resistance, and social structural barriers. It is his view that once token desegregation has taken place, the most critical determinant of the speed of further change is the amount of pressure exerted by the Negro community.[5] Dentler has taken a similar position on the basis of his own participation in several desegregation programs of small northern cities. He believes that in order for desegregation to become possible politically and educationally, Negroes must protest in a visible and unequivocal manner and that this protest must "resonate positively with some influential segment of the white population." It also seems plain to him that a very highly stratified class structure will act as a formidable barrier to desegregation. He then suggests another factor --" a clear, sufficiently intense stimulus from state or other extra-local authorities." In the North, significant change has tended to occur in smaller communities only when impetus has been provided by strong state educational agencies.[6]

La Porte, Beker, and Willie found that in a middle-sized northern city pressures from local Negro protest groups and from the state education department were primarily responsible for initiating action on desegregation. A directive from the state education commissioner on racial imbalance seemed to influence the situation by adding pressure on the local board of education and by helping to get the board "off the hook" with more conservative elements in the community.[7]

White Resistance and Related Problems

Cook, as well as others, has pointed out that attitudes alone are relatively poor predictors of white people's reactions to desegregation. Before integration occurred in the District of Columbia, for example, 52 percent of the white adult population were against it, 24 percent were neutral, and only 24 percent were favorable. But except for a brief strike by some students, which was not supported widely by adults, the first steps toward integration were carried out uneventfully. The school superintendent was sufficiently encouraged to speed up the entire process. When respondents in the pre-desegregation survey were reinterviewed at the end of the school year, it was found that of those who initially disapproved of the Supreme Court decision, only 29 percent felt that desegregation in Washington was not successful. Experiences in other cities bear out the point that even when there is widespread feeling against integration at the outset, the changeover may be affected smoothly and without incident.[8]

Pettigrew has cited evidence that white attitudes tend to become more favorable when desegregation is perceived as a fait accompli or as inevitable.[5] Various alternative explanations of this phenomenon readily come to mind: 1, perhaps actual experience or discussion and reflection show the imagined dangers of desegregation to be false or exaggerated; or, 2, the conflict between reality and the desire for continued segregation generates so much internal tension that the wish is suppressed or abandoned. Research on this problem may yield useful information about the necessary conditions for inducing favorable attitude change.

What is particularly needed to improve our understanding of the relationship between attitudes and overt resistance to desegregation is an emphasis upon the psychological sources of segregationist feelings and beliefs, rather than--as in the past--upon the attitudes per se. To be able to explain why white parents resist racial change in the schools, it is necessary to know in what ways they experience such change as personally threatening when it involves their own children.

Williams has pointed out that any sustained review of the research evidence "will convey a powerful impression of the importance of 'threat' in the entire matter." He discusses the threat of status loss as being particularly potent, since quite often when desegregation occurs the white schools that receive the heaviest influx of Negro students are in working class or lower middle-class neighborhoods where the social status of residents is at best precarious. For these people, there are few if any alternative ways of maintaining status once the prospective change takes place. According to Williams, there is a very wide range of possible threats in a proposed move to bring Negro and white children together in the same schools when they have been separated previously. For example, anxiety may refer to possible increases in cost and taxes; quality of formal education; physical safety and comfort (fear of aggression, fear for health condition, hazards of transportation); social practices (manners, language, etc.); sexual threats; status threat to parents vis-á-vis their ingroup peers; threat to a categorical sense of superiority; and threat to long-run competitive advantages (jobs, housing, politics, etc.).[9]

Additional investigations are needed to determine how the particular sources of threat to white parents vary for different socioeconomic groups, with differences in the structure of the white and Negro subcommunities and with regional, demographic, and rural-urban differences. Once research has identified the various specific fears that white people have about integration, it should be possible to assess their validity in the light of actual conditions and to take appropriate remedial action. Thus, if there is widespread concern about deterioration of scholastic standards, an information campaign could be undertaken to acquaint the population with relevant facts about the impact of desegregation upon the quality of education in comparable communities where the changeover has already occurred and about the various steps that would be taken in the local school system to preserve or even raise academic standards.

In at least one northern community that was studied, white resistance to a "Princeton Plan" school pairing did not appear to be inspired by fear of educational deterioration. Rogers and Swanson found that in a high income professional neighborhood of New York City where interest in school affairs had always been high, as reflected in attendance at Parents Association meetings and other types of activity, a pairing was accomplished smoothly. But in a lower middle-class area, parents who previously had been markedly apathetic about the schools were vehemently opposed to a similar desegregation step. From an analysis of the demographic characteristics of the two areas, the authors concluded that status anxiety was a primary motivating factor in the resisting community. The latter was largely composed of upwardly mobile members of minority cultural groups who had moved to their present homes from ethnic ghetto areas closer to the central city. Because of their limited occupational skills and education, they had probably reached the limits of their residential and economic mobility.[10] Similarly, Tumin has reported that "hard core" resisters to integration in Guilford County, North Carolina, tended to be the low men on the economic totem pole who were the least educated, the narrowest in social perspective, and the most anomic element in the local white population. They were the group that was most vulnerable to Negro competition for jobs and housing and most likely to bear the brunt of school desegregation.[11]

It is both morally and practically desirable that desegregation be carried out on an equitable basis. Common sense suggests that the wider the range of neighborhoods and socioeconomic groups that can be involved in the initial process, the less intense will be the status threat and the resultant sense of victimization experienced by particular white groups. This proposition can be tested by means of comparative studies in two or more communities that are about to undergo either selective or total-system integration. It would also be worthwhile to carry out retrospective studies of localities that have already experienced one or the other type of change. Aside from the question of whether they instigate less opposition, it would be desirable to establish empirically whether or not system-wide changeovers are more efficient than the piecemeal variety by virtue of stimulating and permitting a kind of unified and overall planning that is hardly possible when the latter procedure is followed.

An important aspect of the problem of white resistance has to do with the causes of violence and the development of adequate techniques for its control. It is already well established that the public stance of local officials, law enforcement officers, and political leaders can have a decisive influence on whether outbreaks of mass violence will occur. As Vander Zanden observes, the crucial factor governing the incidence or severity of disturbances attendant upon desegregation has "tended to be the determined, unequivocal policy instituted and pursued by authorities and the stern, nontolerant policy inaugurated toward 'agitators' and demonstrators."[12]

Among the problems still in need of study is that of the relationship between the anomic, psychologically alienated condition of certain low status white groups and the emergence of violent activism. In their study of white resistance to the pairing of schools in New York City, Rogers and Swanson noted "an almost complete absence of intermediate community organizations between the citizenry and the city government. At the risk of oversimplification, the sociopolitical structure of the neighborhood consists of city-wide and local public officials who make major decisions for the area and the large, powerless, alienated, and usually apathetic, though recently very activist, mass." The authors speculated that if the white population had been able to express their interests and grievances through local organizations, "they would have had a built-in safety valve for 'bleeding off' their fears and sense of alienation." If they had had an opportunity to meet with other groups, to hear other points of view, and to have some of their questions answered, they might even have developed a stake in improving the public schools for all children.[10]

These observations may have bearing upon the situation in the Deep South where community organizational activity of all kinds is very low as compared with other regions. But at present it is an open question whether Rogers and Swanson's analysis of the relationship between sociopolitical powerlessness and isolation, on the one hand, and emotional activism, on the other, can be applied to localities other than the one they studied. From a practical standpoint, it is clear that prolonged open debate about the desirability of desegregating a local school system can have the effect of uniting and strengthening the segregationist elements in the community. Nevertheless, there are numerous instances in which desegregation was successfully accomplished in southern and border states with minimal advance publicity or opportunity for discussion. There is a need for research on the factors that govern white responses to relatively open and relatively closed desegregation procedures. Presumably, reactions in the white community can safely be ignored by public officials only when there is good reason to believe that the changeover will not arouse intense feelings of threat and victimization among sizable elements of the population. A particularly harmful type of white opposition is that which takes the form of harassment of Negro children by white students. Permissive attitudes on the part of white parents and school authorities seem to have much to do with its occurrence.

An interesting strategy for studying outbreaks of violence has been recommended by Suchman, Dean, and Williams.[13] It involves assigning special "on tap" field workers the task of going into communities on short notice to do impromptu yet systematic on-the-spot investigations of riots, mob action, etc. Using interview and observational techniques, they would search for significant background conditions that led up to the incidents and would attempt to describe the full course of events. These studies would be guided by hypotheses derived from more extensive types of community research.

Negro Attitudes About School Desegregation

That Negroes have not pressed vigorously for school integration in the South and North is apparent to all close observers of the civil rights movement. According to Lomax, "NAACP people are hesitant to talk about it, but they are having a most difficult time getting local parents to start integration suits." On the whole, he adds, "Negro parents don't seem to be interested in school desegregation--and not just from fear of reprisals, but simply because school integration isn't something large numbers of Negroes get excited about."[14] Indeed, one has only to recall the stated goals of the major Negro protests and demonstrations of recent years--Montgomery, Birmingham, Selma, and so on--or to examine the writings of Martin Luther King, Whitney Young, and other Negro leaders to recognize that school integration is not a high-priority target of the Negro revolution. Even in the large cities of the North, civil rights advocates who agitate for an amelioration of de facto segregation are disheartened by the lack of grass roots support. To those who believe that integration is the only feasible way to achieve educational equality for minority group children, the present situation is indeed unfortunate because numerically meaningful integration is not likely to occur in the foreseeable future except in response to determined Negro pressure.

At first glance, the apathy of many Negroes regarding school integration appears to reflect a lack of genuine interest in quality education, for it is certainly true that racial discrimination has long kept Negro education devoid of any real economic utility. Though the job market has improved in recent years, exclusion from white-collar and skilled employment is still a basic fact of life for most non-white Americans. In their responses to survey questionnaires, however, Negro parents display a considerable amount of concern about the adequacy of the education their children are receiving in public schools. In a study of the Negro community in Tallahassee, Killian and Grigg found that the need for better schools was ranked second in importance in a list of 18 sources of dissatisfaction.[15] Looking more closely at the apparent indifference of Negro parents to school integration, one begins to suspect that it is in large measure a manifestation of feelings of threat that are not unlike those experienced by the white resisters--though different in specific content. Negroes may be afraid to expose their children to the open prejudice of white classmates and teachers or to devastating experiences of academic failure. In southern communities where entrance into previously all-white schools is on a "free choice" basis, Negro parents often have realistic fears of official harassment, economic reprisals, and even physical harm. Moreover, southern Negro teachers, who often comprise the most numerous local Negro professional group, stand a good chance of losing their jobs when school systems become integrated. Killian and Grigg's data indicate that Negroes do not perceive quality education and desegregation as closely connected issues; therefore, although "better schools" was their second most important public concern, school integration had next to the lowest rank of all 18 items. Clearly, Negroes must be made aware through the dissemination of information that separate schools are intrinsically unequal. Widespread desegregation will not become politically possible until large numbers of minority group parents begin to feel that it is necessary.

The ability of Negroes to bring effective pressure to bear upon local officials will depend upon the level of internal communication, organization, and unit of purpose of the Negro community. Suchman, Dean, and Williams[13] observe that the Negro community is "actually a complexly differentiated cluster of subgroups, varying in socioeconomic status, geographic origin, occupational type, intelligence level of children, and attitude toward school desegregation. This internal differentiation is likely to be as complex, if not more so, than the differentiation within the majority community." Research on minority communities can reveal communication barriers between leaders and the population and between various segments of the community. For example, in her investigation of the Negro community in a small city in the mid-South, Burgess found that Negro leaders who favored desegregation were backed on this issue by 85 percent of the Negro upper class, but by only 60 percent of the middle class and 40 percent of the lower class. Not more than 48 percent of the total Negro sample favored immediate desegregation. Thus, the most active leaders were "out in front" of their constituency--especially the less educated and lower income elements--and in danger of being repudiated or censured.[16]

Case studies of Negro communities may reveal various ways in which leaders can improve their relations with different segments of the population. The motives, perceptions, goals, and action strategies of the former can be compared with the attitudes and needs of the latter. Suchman, Dean, and Williams favor the use of "action research" techniques in Negro communities. Research personnel would work as "change agents" with community organizations to achieve the coordination of minority leadership structures; the coordination, unification, and increase of communication channels within the total minority community; and, finally, the opening of channels of communication with the white community.[13]

Case Studies of School Desegregation

In-depth case studies of communities with different demographic, economic, and political-social characteristics can contribute much to our understanding of the basic forces that govern the course and the speed of desegregation. These investigations can focus on the processes leading up to the decision to comply with the Supreme Court ruling and/or on the processes of planning and accomplishing the changeover to nonsegregated schooling. The approach is exemplified by La Porte, Beker, and Willie's study of the evolution of a school desegregation policy in a small northern city. Their inquiry included: 1, the sequence of action on the issue; 2, the structure and dynamics of "democratic" action in the city; 3, functional relationships among the public, the board of education, and the professional administrators of the school system; 4, the relative contributions of particular individuals and groups to community decisions; and, 5, extra-community influences. Their chief sources of information were documents (minutes of meetings, policy statements, reports, etc.); lengthy interviews with key participants (the Mayor, members of the board of education, school administrators, heads of citizens' organizations, etc.); and direct observation of meetings and public hearings.[7] Case studies of this sort are rich sources of insights and hypotheses which can later be tested systematically by means of cross-community studies that utilize a relatively large sample of localities from which highly specified types of data are obtained.

Dentler observes that barriers to school integration in the North are far less formidable in smaller cities and suburbs than in big cities.[6] In smaller communities, technical solutions are available in abundance; and once the decision to desegregate has been made, it is relatively easy to prepare the community and the schools for the changeover. In big cities, however, technical solutions are few in number and generally drastic in effect upon both the clientele and the practitioners. Also, problems of communication between the board of education and parents and problems of new staffing and coordination of effort within the school system, etc., are far more complex. Dentler points out that among the six largest cities in the North, only Detroit has made some progress toward improving the racial balance of schools. "New York City, Chicago, and Philadelphia are more severely segregated today than they were in 1954." The situation calls for systematic case studies of our major metropolitan areas along the lines of the La Porte, Beker, and Willie inquiry. As Dentler puts it, "We must look to the social and cultural bases of Northern big city life to understand why so little change has occurred . . . We must take into account the political context and the cultural milieu of urban public education."

RESEARCH ON DEVICES AND STRATEGIES FOR ACCOMPLISHING DE FACTO DESEGREGATION

According to Dentler, several partially adequate technical solutions have been proposed for each of the larger northern cities. The two most promising technical solutions, he states, are also the most radical:

> One is the concept of the educational park. Here, big city systems would abandon neighborhood schools (or use them for very different purposes, such as community centers) and erect consolidated facilities housing from 5,000 to 20,000 students. Such a campus-style institution would be located to draw its students from a very wide residential base, one broad enough, perhaps, to surmount long-term changes in class and ethnic settlements. A second, related idea is to merge mainly white suburban school districts with increasingly Negro inner-city districts. District mergers could be achieved by state authorities and could break through ancient patterns of residential restriction.[17]

The most exciting aspect of the educational park idea is its potential for achieving excellence in public school systems, while at the same time providing a technical means of improving racial balance over wide areas. The park would allow the sharing of physical facilities on a rational basis; provide a wider range of special services--academic, remedial, counseling--than any single school; provide maximum opportunity for effective decentralization; allow flexible use of teacher skills; and permit greater opportunity for creative innovations such as closed-circuit television, team teaching, language laboratories, and automated equipment. There could also be fiscal gains over and above those resulting from improvements in operational efficiency, because much of the cost of the parks could be paid for by the Federal government under Title 1 of the Urban Renewal Act of 1949. As the first educational parks come into being in various parts of the United States, it will be important that their educational and administrative merits and their ability to achieve racially balanced enrollments receive careful and systematic evaluation.

Another promising technical device mentioned by Dentler, the merging of suburban and central city school districts, could bring about massive and favorable changes in the ratio of white to Negro pupils in metropolitan school systems. Cases of this type of redistricting should be assessed for their effects upon residential occupancy patterns, percentage of white pupils who transfer to private schools, staff turnover and morale, scholastic standards, attitudes and organized response of parents, etc.

Compliance of School Officials with Desegregation Plans

Studies of the implementation of desegregation plans must take into account the extent of compliance of field personnel in the school system --

assistant superintendents, principals, and teachers--with directives from the superintendent. Rogers and Swanson[10] suggest that these personnel, especially the principal, have tremendous impact upon the extent of acceptance of white teachers, parents, and pupils of an incoming group of Negroes. The principal and others "may effectively negate, sabotage, or at least water down an integration plan that was developed after many months, perhaps years, of study and discussion."

"Freedom of Choice" Versus Mandatory Integration Plans

Research is needed to evaluate the relative merits of "freedom of choice" and mandatory integration plans in the South. Some civil rights leaders contend that it is unrealistic to expect that Negro parents in the South will ever initiate voluntary transfers of their children to predominantly white schools to any significant extent--that under this procedure integration will probably never become a reality in the Deep South. It has been argued that having to apply for transfer gives the Negro the feeling of changing schools in order to be with white people. Lomax[14] suggests that "this is a difficult psychological hurdle for Southern Negroes to overcome. The truth is, on the whole, they don't want to be with white people as such. They do want the best schools, however . . ." Requesting transfer also exposes the Negro parent to white displeasure and possible vindictiveness. By slowing down the rate of integration, "free choice" plans prolong the period that young pioneer pupils remain a small, isolated minority, acutely vulnerable to the debilitating effects of social isolation and rejection by the white majority. Research is needed to show whether mandatory plans can introduce Negro newcomers into previously all-white schools in large enough numbers so that they can provide security for one another without arousing a high level of white resistance at the same time. Research could also test the proposition that mandatory plans are better than "free choice" plans in that they allow for rational, system-wide planning with regard to optimal distribution of students in relation to available staff, facilities, and space.

Enlisting Support of Influential Private Citizens

There is increasing evidence of a move on the part of the southern business community toward an accommodation with the civil rights program of the Federal government. For example, the Committees of One Hundred in Alabama and Mississippi, which consist of the top 100 business leaders of each state, have publicly advocated compliance with the Civil Rights Act. While other motives may be involved, economic self-interest is clearly consistent with this change to a more progressive position on racial matters. Research can explore techniques for activating local business leaders in support of prompt and orderly school integration. Perhaps forums and conferences could be organized at colleges and universities on problems of education and local economic development and talks could be scheduled by visiting Federal officers.

RESEARCH ON THE EFFECTS OF DESEGREGATION

Among the important areas for research are the effects of desegregation on: 1, residential occupancy patterns; 2, parental attitudes and participation in school activities; 3, stability, morale, and attitudes of school staffs; 4, scholastic performance of white and Negro children; 5, social relationships among pupils of the same and different races; and, 6, self-concept, attitudes, and emotional adjustment of white and Negro pupils. Ideally, all of these variables should be studied by means of before-and-after research designs, with nondesegregated schools as controls. The present discussion, however, will be limited to the effects of desegregation on pupils covered in topics 4, 5, and 6 above.

Recently, two major investigations, one conducted by the U.S. Office of Education and the other by the U.S. Commission on Civil Rights, have been carried out in these areas. The U.S. Office of Education survey, Equality of Educational Opportunity (the Coleman Report),[1] embraced a fairly representative sample of over 4,000 elementary schools and high schools throughout the nation. Both questionnaires and objective tests were administered to pupils and teachers, with additional data being gathered on school facilities.

In evaluating the significance of the findings in this massive report that are relevant to the effects of desegregation, it is important to recognize that they are merely correlational and that causal inferences must be drawn with utmost caution. The report indicates that the achievement of both Negro and white pupils, when their family background characteristics were partialled out, was more closely related to the educational proficiency of their classmates than to all objective school characteristics together (i.e., curriculum, expenditure per pupil, physical facilities, size of class, etc.) and to all teacher characteristics together (type of education, experience, verbal ability, attitudes, etc.). In the upper grades, the apparent influence of the quality of the student body on individual achievement was two to three times greater for Negro pupils than for white pupils.

Given the relatively high proficiency of white students, it is not surprising that as the proportion of whites in a school increased Negro achievement rose and that the effect was cumulative. The apparent impact of desegregation can be illustrated by comparing test scores in reading comprehension for Negro high school students in the metropolitan North, who never had a white classmate, with scores of metropolitan northern Negroes with similar family backgrounds who attended racially mixed schools from the early grades. When figures from Table 3.3.2 of the Coleman Report are consolidated, it is revealed that Negro ninth graders in predominantly white classes whose first interracial experience occurred in the primary grades had an average score of 48.2. This is about five points below the white norm for the same region, but less than two points below the national norm of 50.0. In contrast, Negro ninth graders who had never had white classmates averaged 43.8--almost 10 points below the white regional norm. Thus, it seems as though desegregation reduced the racial achievement gap by almost half. (The results based upon Negro twelfth graders are similar, but perhaps less convincing because of the high rate of Negro dropouts after the ninth grade.) Additionally, the test scores of Negroes in majority white classrooms showed much more variability than did the test scores of Negro children in classrooms with a smaller proportion of whites.

When the influence of the student body's educational background and aspirations was controlled, the relationship between racial composition of schools and Negro test scores appeared to be sharply reduced. Hence, Coleman and his associates concluded that the apparently beneficial effect of having a high proportion of white classmates did not come from racial composition per se, but from the high educational quality that is found, on the average, among white students.

Also associated with the amount of interracial contact were Negro attitudes toward scholastic effort. As the proportion of whites in the school increased, Negro children were more likely to feel that success and failure depended upon what they themselves were able to accomplish. This perception of fate control was strongly related to the test scores of all Negro groups. With or without family background characteristics partialled out, it accounted for about three times as much variance in the test scores of Negroes as of whites at the higher grade levels, both in the North and South. However, on another attitude that was less closely related to Negro test performance, desegregation seemed to have an adverse effect: Negro children in racially mixed classrooms tended to rate themselves lower on intellectual ability than Negroes who were racially isolated. Apparently, gains in the sense of fate control for integrated children outweighed the detrimental effects of lowered self-esteem, since actual achievement was relatively high.

A final item from this survey that should be mentioned is the fact that there were data on the percentages of white students in the ninth and twelfth grades who chose all-white "close friends" and preferred all-white classrooms. Quite consistently, the effect of desegregation appeared to be favorable: White children who began their interracial school experiences in the first three grades tended to have less preference than other white students for all-white friends and classes.

Due to the time pressures under which it was prepared, the Coleman Report devoted relatively little attention to the effects of desegregation. The U.S. Commission on Civil Rights, therefore, undertook the tasks of more thoroughly analyzing certain portions of the Coleman data and of carrying out new investigations that had bearing on this problem. The Commission was particularly interested in establishing whether or not the apparently favorable effects of desegregation could be attributed, at least in part, to the factor of racial composition per se when the following additional differences between racially mixed and isolated classrooms were controlled by means of crosstabulations: 1, quality of educational services available; 2, academic ability and social class background of classmates; and, 3, academic ability and home backgrounds of the Negro students. Controlling for these three sets of factors, the Commission found a consistent relationship between racial composition of the classroom and Negro verbal achievement. The apparent benefits of interracial classrooms were not linear; that is, Negroes in predominantly white classrooms scored higher on the average, but those in classrooms with some, but less than half, whites, did no better than those in all-Negro classrooms. As pointed out in the Coleman Report, the beneficial effect appeared to be greatest for those Negro children whose biracial contacts began in the early grades. Moreover, the achievement scores of white children in classes with some, but less than a majority of, Negroes were just as high as those of their counterparts in all-white classes.

The Commission suggested that an important contributing element to the inefficiency of racially isolated schools is the fact that they are often regarded by the community as inferior institutions and that students and teachers sense that their schools are stigmatized, with detrimental consequences for their motivation.

Special surveys of white and Negro adults revealed some of the long-lasting consequences of school segregation. The Commission's report, _Racial Isolation in the Public Schools,_ states:

> Racial isolation also appears to have a negative effect upon the job opportunities of Negroes. Negro adults who experienced desegregated schooling tend to have higher incomes and more often hold white-collar jobs than Negro adults who attended isolated schools. These differences are traceable to the higher achievement levels of the Negroes from desegregated schools, and, in part, to the fact that association with whites often aids Negroes in competing more effectively in the job market.
>
> Attendance in racially isolated schools tends to generate attitudes on the part of Negroes and whites that lead them to prefer association with members of their own race. The attitudes appear early in the schools, carry over into later life, and are reflected in behavior. Both Negroes and whites are less likely to have associations with members of the other race if they attended racially isolated schools. Racial isolation not only inflicts educational damage upon Negro students when they are in school, it reinforces the very attitudes and behavior that maintain and intensify racial isolation as well.
>
> Moreover, the absence of interracial contact perpetuates the sense that many whites have that Negroes and Negro schools are inferior.[18]

Despite the thoroughness of the Commission's cross-tabulational analyses, it could not surmount the basic limitations of cross-sectional research designs. Only longitudinal studies, involving experimental features such as before-and-after measurement, matching and random assignment of subjects to different types of schools and classrooms, and elaborate safeguards against the biasing effect of the "Hawthorne" and similar phenomena, can provide definitive answers to questions about the effects of desegregation. However, the two Federal reports discussed here stand as rich sources of hypotheses for future research and as the best available empirical guides for the practical decision-making of public and school officials.

Finding the Mediators of Desegregation Effects

The Commission report stressed the distinction between a merely desegregated school and an integrated one. Desegregation refers only to the racial composition of student enrollments, while integration involves the social psychological quality of the interracial contact. Calling attention to the Coleman survey's finding of greater variability of Negro test performance in biracial classrooms, Pettigrew observes that "merely desegregated schools can be either effective or ineffective, can boast genuine interracial acceptance or intense interracial hostility. In short, a desegregated school is not necessarily a 'good school.'"[5] The Commission's analysis indicates that in desegregated schools where most teachers reported no racial tension, Negro students were higher on verbal achievement, had more definite plans for attending college, and had more favorable racial attitudes than Negroes in schools with high tension levels.

In a series of experiments, the present author and his associates have sought to clarify the factors that determine whether biracial contact will have beneficial or detrimental effects upon the intellectual performance of Negro students.[19] In two early studies conducted at a northern university, various tasks were assigned to groups composed of two Negro and two white students. In a variety of conditions, the Negroes were found to display marked inhibition and subordination to white partners. They made fewer remarks than did the whites and tended to accept the whites' contributions uncritically. Later, they ranked the whites higher on ability and expressed relatively low satisfaction with the group experience. These effects occurred even when Negro and white partners were initially matched for ability on the basis of pretest scores. The inhibition of the Negro subjects was modified only after they were placed in a rigged problem-solving situation which virtually forced them to disagree with a white partner while displaying competence equal to that of the partner. The results suggested that fear of arousing white hostility was an important constraining factor.

The white subjects, apparently unaccustomed to having interactions with Negro peers, tended to ignore the suggestions of their Negro partners even when this entailed a reduction in team efficiency and, consequently, in monetary reward from the experimenter.

In another experiment, students at a predominantly Negro college in the South performed better on a verbal task in the presence of white peers and adults when stress, in the form of a threat of electric shock was absent and the task was presented informally. But when Negro subjects expected strong shock, the white environment became less favorable for performance than an all-Negro environment. Thus, vulnerability to stress was greater in the biracial condition, even though it did not become apparent until a strong explicit threat was introduced. Similarly, in a further experiment, southern Negro college students scored higher on a verbal task with a white tester than with a Negro tester when the task was presented as a measure of nonintellectual capacity (e.g., eye-hand coordination). When the same task was described as an intelligence test, however, the relationship tended to reverse.

In later studies, most of them as yet unpublished, two factors have been varied independently of one another--the race of the experimenter and the race of the peer norms with which Negro subjects expected to have their test score compared. When Negro adults were used to administer cognitive tests, the academic quality of the predominantly Negro colleges from which subjects were drawn seemed to determine their reactions to the white norm and Negro norm conditions. At colleges with relatively low academic standards, Negro students performed better when they expected to be compared with other Negroes. On the other hand, at colleges with high academic standards, anticipated comparison with white peers was more motivating.

The effect of varying the race of the adult examiner when the race of the comparison group was held constant, also seemed to depend upon the academic quality of the Negro colleges at which the experiments were carried out. At a college with a selective admissions policy, Negro students worked better on cognitive tasks for a white tester while Negro students at a non-selective college scored higher with a Negro tester.

Finally, Negro performance in various types of racial settings was shown to be influenced by the subjects' expectations of success, which were manipulated by providing fictitious information about their scores on pretests. A moderate expectancy (i.e., 60 percent probability of success) produced better cognitive performance in both biracial and uniracial environments than did a very low expectancy (i.e., 10 percent).

All of the experimental findings of this author and his co-workers are consistent with a four-factor model of Negro achievement in biracial settings, which he has summarized:

> Low probability of success--where there is a marked discrepancy in the educational standards of Negro and white schools, or where feelings of inferiority are acquired by Negro children outside the school, minority-group newcomers in integrated classrooms are likely to have a low expectancy of academic success; consequently their achievement motivation should be low. Social threat--given the prestige and power of the white majority group, rejection of Negro students by white classmates

or teachers should tend to elicit emotional responses (fear, anger, and humiliation) that are detrimental to intellectual functioning. Failure threat--when academic failure entails disapproval by significant others (parents, teachers, and perhaps also classmates), low expectancy of success should elicit emotional responses that are detrimental to performance.

On the other hand, acceptance of Negroes by white peers and adults should have a social facilitation effect upon their ability to learn, by motivating them to adhere to white standards of academic performance; anticipation that high performance will win white approval should endow scholastic success with high-incentive value.[20]

A recent study underscores the complexity of these mediational processes. Heretofore, the experimental subjects had mostly been Negro college students. But when grade school Negro boys from a New York City slum were tested, the social facilitation factor previously evident with white experimenters did not operate.[21] Better learning of a verbal task occurred with Negro adults than with white adults, even when all examiners gave overt approval at regular intervals. Apparently, the racial attitudes which the Negro children brought to the experimental situation caused them to reject approval from a white stranger as insincere. As measured by a personality questionnaire, however, disapproval from white testers was highly damaging to performance, particularly for Negro boys with a strong need for approval.

In a provocative article, Pettigrew shows how social comparison concepts can be applied to the dynamics of the biracial classroom.[22] He proposes a broad hypothesis which is consistent with the empirical findings and interpretations of this author, as well as with data from both the Coleman and Commission reports. Pettigrew suggests that "many of the consequences of interracial classrooms for both Negro and white children are a direct function of the opportunities such classrooms provide for cross-racial self-evaluation." It follows from such a hypothesis, he continues, "that the more opportunities for cross-racial self-evaluation a school provides, the greater the consequences. And it also follows that those children for whom peers of the other race become referent should evince the largest changes." Among the many predictions from the hypothesis that are consistent with the Federal data is one to the effect that the major consequences of interracial schools for both Negro and white students would be found among those who report having close friends of the other race. No tables relevant to the prediction are available for whites. For Negroes, however, it was found that having close white friends was related neither to achievement test scores nor to college aspirations in all-Negro classrooms, but in predominantly white classrooms Negro children with close white friends showed both higher achievement and higher educational aspirations than Negroes having no close white friends.

Pettigrew's hypothesis specifies consequences of desegregation and not simply benefits. He discusses the conditions under which cross-racial comparison would arouse anxious expectations of failure and feelings of social threat in Negro students. But he concludes that on balance the consequences of such comparison appear to be beneficial. The Federal surveys, it will be recalled, revealed higher performance levels among Negro children in majority white classrooms and generally favorable attitudes toward desegregated education on the part of Negro adults who had themselves attended desegregated schools as children.

Teacher Characteristics and Their Influence on Learning

Research is urgently needed to unravel the underlying social-psychological dynamics of the teaching-learning process. Some illuminating facts about teachers of white and Negro pupils were recently reported by Herriott and St. John.[23] Their data are based upon interviews with a national sample of teachers and principals in urban public schools. Schools were divided into four categories on the basis of the socioeconomic level (SES) of the pupil enrollment. Not surprisingly, racial composition of the student body was closely related to SES. Thus, only two percent of students in schools of highest SES were Negro, while 73 percent of pupils were Negro in the schools of lowest SES. Both principals' and teachers' replies to a series of questions indicate that the lower the school SES, the smaller the proportion of teachers who enjoyed their work, had personal loyalty to the principal, desired to remain at their present school, had favorable opinions of the motivation and behavior of their pupils, and did not waste a lot of time in the classroom. As reported by principals only, the lower the school SES the smaller the proportion of teachers who were competent, made an effort to improve their competence, and were strongly interested in their students. The meaning of these teacher differences is that, on the average, children from low-income homes, most of whom are Negro, got more than their fair share of classroom exposure to teachers who are really unqualified for their role, who basically resent teaching them, and who, therefore, behave in ways that foster in the more dependent students tendencies toward debilitating self-criticism.

Without knowing more about the matter, one might be tempted to assume that these teachers are essentially reacting to the intellectual and motivational deficiencies of the minority group pupils. But, surely, this is only partly true. Davidson and Lang found that *regardless of their scholastic standing*, elementary school pupils from blue-collar homes tended to perceive their teachers as rejecting.[24] In two small sample studies, one by Gottlieb and another by Clark, the race of teachers seemed to make a difference in how they viewed Negro students, with white teachers (who outnumber Negro teachers in most predominantly Negro schools in the North) being more critical of their motivation and ability.[25] [26] But one should not conclude on the basis of very slight evidence that there is a general race difference among teachers. In a segregated Detroit school where this author found Negro boys of average and below average ability inclined to be harshly self-critical, the teaching staff was predominantly Negro.

Experiments could be done on teachers' responsiveness to children's needs as a function of racial differences. White and Negro teachers could be required to observe biracial groups of children and then to report on each child, first at a descriptive level and then at an inferential level where the child's emotional needs and interests were considered. The richness and detail of report and validity, when compared with objective information, could be evaluated in relation to the race of the teacher-observer and the race of the object-child. It could be ascertained what teacher characteristics are associated with accuracy of observation of own-race and other-race children. One might also examine the characteristics of teachers children like and from whom they learn readily.

An ingenious experiment by Rosenthal and Jacobson on the effect of teachers' expectations upon the intellectual growth of their pupils suggests another worthwhile direction for future research.[27] Elementary school teachers were told that certain children were likely, on the basis of fictitious test scores, to "spurt ahead" intellectually during the ensuing year. At the lower grades, the randomly designated "intellectual bloomers" showed larger I.Q. gains at the end of the year than their classmates. The effect was due entirely to the expectation that had been implanted in the minds of the teachers. Rosenthal and Jacobson's data, however, do not tell us in what specific ways the teachers' expectations affected their behavior toward the experimental group pupils. It is important, therefore, that the experiment be followed up with studies in which teachers would be given different kinds of information about a child (e.g., whether he is bright or dull, middle class or working class, Negro or white) and then required to teach the child a standard task. A question to be asked would be "do the differential cues influence the amount of effort expended by the adult in instructing the child, the amount and kinds of reinforcement, unconscious expressions of acceptance or rejection?" One might also examine whether the child senses the teacher's attitude toward him by testing his perception of the teacher after the instructional period. The results of such experiments could be used in the training of new teachers as a means of sensitizing them to the human relations aspects of their future work.

CONCLUDING REMARKS

The purpose of this paper has not been to present an exhaustive review of previous research on desegregation, but rather to indicate the major areas in which further empirical work is needed both from the standpoint of guiding public policy decisions and advancing basic scientific knowledge. Various findings and hypotheses have been discussed when they appeared to offer promising leads for future inquiries. Many informative and valuable studies have been omitted because they seemed to be less directly relevant to issues of public school desegregation than those that are mentioned. Clearly, only a lengthy monograph could begin to do full justice to the present topic, but it is hoped that this brief discussion will provide a useful point of entry for interested social scientists into a range of practical and theoretical problems that invite their attention.

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PROBLEMS, PROGRAMS, AND RESEARCH IN COUNSELING THE DISADVANTAGED

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Disadvantaged, culturally deprived, educationally deprived, underprivileged, lower class, lower socioeconomic, minority group--these terms seem to be used interchangeably. Regardless of the label, the focus of our concern is the culturally different adolescent whose background, through environment or heredity, fails to provide what we consider adequate developmental opportunities.

There always seems to have been a controversy about whether we should blame inheritance and/or environment for the problems encountered in working with these students. Thinking has vacillated over the years from the view of projection, emphasizing factors of inheritance, to the view of reflection, emphasizing mechanisms underlying behavioral organization. Regardless of which view is in the ascendancy or what research has indicated, the projective view seems to be reflected in a monitoring approach (rather than in a stimulating approach) to their academic capabilities, potentialities, and personality development. Assumptions regarding ability have caused a low ceiling to be placed over their heads. It is easy for the school to see these young people as hostile, rebellious, defiant, or lazy. The inability of the middle-class teacher to understand those from deprived homes contributes to their leaving school attitudinally in the second grade and physically in the tenth grade.

A little Negro boy took home his first reader and asked, "Mommy, where am I in this book?" He had looked at all the pictures and could find none with which he could identify.

The second grade teacher asked her class to draw a picture of a fairy and make it flesh color. The only little Negro girl in the class enthusiastically handed in her picture of a neat brown fairy and the teacher exclaimed, "But, honey, I told you flesh color!"

When children are made to feel literally out of the picture in the first and second grade, small wonder that the appetite for education is depressed. Moreover, when disadvantaged children are expected to conform to a pattern of behavior foreign to them, there is cause for confusion and conflict because the way they behave at home does not fit the action expected of them in the school setting. It has been suggested that this is an area for guidance--to help these students reconcile the demands of these two cultures.

Vontress, in an address at the 1965 convention of the American Personnel and Guidance Association, presented some brief background facts about these deprived students. Approximately one-third of these children come from homes in which no man is present. From one-third to one-fourth of all births in these homes are illegitimate. The home is usually female dominated even though a man is present. It is estimated that about 75 percent of these pupils drop out of school before finishing high school. Among culturally different Negroes, self-hatred seems pervasive and is thought to be environmentally induced. The self-hating child fears learning as he fears loving; he is often angry and anxiety laden, and this leads to his being removed. hesitant, and mistrustful. With little regard for himself, he is unlikely to strive to achieve. Often he seems to reject things as a matter of course, and this includes, of course, the values and aspirations of middle-class society.

Vontress went on to point out that the school, as a social agency charged with the preservation of society through the transmission of culture, must build commonalities among people. The counselor as an integral part of the system is not going to help this important cause if he sees these students as dirty, defiant, inferior, and difficult to work with or if he erects psychic walls that are as clearly felt by the counselee and are more impenetrable than any physical wall.

Battle and Rotter, in a study of internal-external control, found that lower-class Negroes were significantly more external than middle-class Negroes or whites. This feeling of having no control over the things that happen can result in apathy or hostility, and both result in alienation. Significantly, badly functioning schools and unsupportive home environments can both be contributing factors.

The counselor working with disadvantaged students cannot be urged strongly enough to read extensively and thoughtfully about the cultural backgrounds from which his counselees come. Knowing about the cultural background of Puerto Ricans, for example, would help the counselor realize that among these people the man is supposed to be the head of the family and that he may get further with the family by making his first contact with the father. On the other hand, the counselor should know that among lower-class Negroes, even when the father is present, the home is usually female dominated.

In the larger cities, more Negroes live under conditions of residential segregation today than 20 years ago. As the Negroes have moved into the cities, the whites have moved to the suburbs, and a new social relationship pattern has formed. Chicago provides a typical example. There are almost one million Negroes in Chicago, and 85 percent of them live in communities where more than 90 percent of the population is nonwhite. Unemployment among Negroes ranges from 12 to 20 percent in most communities--occasionally reaching as high as 50 percent. The national unemployment rate is averaging five to six percent.

The former rural underemployed are now the urban unemployed. No longer is having the muscular strength to accomplish a task sufficient insurance for employment. The unskilled jobs requiring physical labor have declined sharply. There is more demand for white-collar than blue-collar workers. Since those we think of as the disadvantaged could heretofore find employment in the manual, blue-collar area, we must be concerned with guiding these young people into other means of livelihood and job satisfaction.

The areas in which these people live have the poorest public services--including, in many cases, educational services--and the highest birthrates. This situation is probably at its worst in the rural South, but it is still extremely poor in the urban North where taxes are not sufficient to provide the teachers and facilities that could more rapidly improve the chances of the disadvantaged.

The earlier the child can be provided with assistance in his socialization and the more the parents can be guided to cooperate with those who can help, the more effective the program for the disadvantaged will be. According to Ginsberg:

> . . . A meaningful definition of guidance is the sum total of influences to which an individual is exposed that operate to direct his behavior in one rather than another direction. Actually then, his parents, his peers, teachers, anyone with whom he comes in contact and interacts have a part in his guidance and the contacts that are the most influential steer him in one direction or another.[1]

Parental home contacts by school personnel are of great importance in helping people think more affirmatively about education. Communication is an important issue in providing for the kinds of compensatory learning experiences required for upgrading culturally isolated children. Ginsberg points out the importance of structuring the first three years in school so that these children's problems are differentiated and treated accordingly, rather than giving the same therapeutic dosage to all regardless of the source and symptoms of the disease.

The same social process that has produced the conformer has produced the nonconformer, the affluent, and the deprived. In counseling these students, it is necessary to realize that the attitudes and behavior which have been labeled as bad, disruptive, or objectionable are the attitudes and behavior that have provided these students with a way of adjusting to their environment and of coping with the deprivation in which they live. Their subcultures enable them to tolerate otherwise intolerable conditions.

Strengths arise from efforts to cope with a negative environment. The Negro matriarchal family is a coping device, and while it is not necessarily a good family pattern, it provides the only seemingly stable, organized, independent element of the home.

It is so easy to forget that life has treated most of us entirely differently than it has treated them. Our expectations, our goals, the way we see ourselves, the way we think others see us, the meanings we derive, are so different. Respect for us, confidence in us, being at ease with us, or communicating with us is not automatic or easy when a great deal of the contact they have had with middle-class individuals has not been constructive or positive, has not engendered what we think of as the counseling relationship.

Communication between minority group pupils and a counselor may be initially limited by negative attitudes toward school authority. The counselor's intent and competence are looked upon with suspicion. This is not surprising, however, when we consider that most of their experience has been with law enforcement authorities or with people who look down upon them and see their only potential as one of causing trouble.

In a 1964 American Personnel and Guidance Association Convention address, Rousseve identified a complex of undesirable behavior patterns which he called "the alienation syndrome."[2] These behavior patterns were: 1, the lack of adequate self-concept; 2, intellectual listlessness and poor scholastic achievement; 3, no clear system of personal goals or values; 4, overindulging in social and recreational pursuits which are of little real worth; and, 5, an underlying attitude of depressive and, at times, hostile defeatism.

Research studies have indicated a wide discrepancy between the high vocational aspirations of Negro youth and the knowledge and value orientations needed to realize them. However, the evidence relating personal dynamic factors to the occupational choices of Negro youth is scant and inconclusive. Counselors, apparently, have not made much progress in helping the Negro student understand himself.

Another marked discrepancy exists between the occupational aspirations of these young people and the employment patterns of their parents. Educational expectations may be very low and, therefore, encouragement of the student minimal by disadvantaged families. There is an inconsistent push to get out and get a job with no job skill. Some of these children aspire to occupations higher than those of their parents which complicates the provision of a role model and causes intense conflict between the student and his parents who do not understand these aspirations.

Relative to this problem are the objectives often stressed in counseling--adjustment to the environment and individual development. Particularly in relation to minority youth, these goals do not seem compatible and may be a constant source of confusion, conflict, and frustration. On the one hand, these students are urged to be proud of their group and of their individuality and are advised that their horizons are unlimited if they will apply themselves. On the other hand, it seems that they are guided toward rejection of their minority group and made to feel that their cultural and ethnic identity cause all but insurmountable handicaps.

In an effort to alleviate this type of problem and to help parents understand such things as scholarships, Detroit developed a Family College Counseling series of meetings. A liaison person (who can be a paraprofessional) served as a bridge between the school and parents. Parents who participated not only became better informed about college possibilities for their children but also more interested in contacting the school about younger children in the family and in seeking more help from the counselors for themselves, as well as for their children.

Changing their self-concept is the important part. Asgood, an attitude analyst, recommended the semantic differential method. He reduced all the common descriptive adjectives to three dimensions: 1, good-bad; 2, strong-weak; and, 3, active-passive. He suggested that the student must be helped to see himself as better, stronger, and more active than he had been the day before--as a participant rather than as someone constantly on the sidelines. Steps in doing this usually involved:

1. Truly listening to the student as he talks about his problems and making him know and feel that there is someone really interested in him as an individual.

2. Helping the student talk about his problem. (Some minority group or disadvantaged students are less verbal than those from higher socioeconomic levels. It requires encouragement and feeling with them to draw out words and feelings from them. Problems once verbalized and laid on the table are often not as formidable, and fears lose their force and shrink from the mountain to the mole hill through exposure to the light.)

3. Helping the student realize that he is not alone with his problem and that others experience the same troubles and find ways of handling them.

4. Helping the student to see himself as others see him, without damage to himself, and helping him understand why so he can do something about the situation.

5. Helping the student learn to accept himself as he is and see that the interactions he has with others have a part in his self-concept but that they are often changeable or controllable.

6. Helping the student find his strengths and helping him build upon them.

In all these areas, other members of the educational team should be called upon for their assistance and support in working with these students.

We cannot lump all disadvantaged students together and administer the same dosage of therapy. In placing them in small group guidance sessions, there must be a differential according to type, and counselors must discover and learn more effective ways of working with these various differences.

In any discussion of counseling the disadvantaged, we cannot leave out some mention of delinquency. Poor background, insufficient education, and idleness are all good breeding grounds for delinquency. Kvaraceus emphasizes the need for each community to diagnose the nature and extent of its own problem and the resources for combating it. The counselor is in a unique position to serve as liaison between the school and community. It is easy not only for the community but also for the school staff, including counselors, to be so irritated with the behavior of the delinquent that their attitude toward him is primitive and rejecting.

The counselor is also in a position to see indications of potential delinquency and to attempt preventive measures. There are certain patterns of personal, home, family, neighborhood, and school deviations that seem more characteristic of the delinquent than the nondelinquent.

Both the preventive and remedial aspects of combating delinquency stand a better chance of success when treated as a joint project with the school guidance department functioning as a bridge joining the efforts of the personnel and educational team and the entire community. In this function, too, the guidance department is in a position to contribute to the scant research in the field.

Gordon and Wilkerson speak of student appraisal and evaluation as "typographical" and "topological" studies when referring to the "detailed qualitative analysis of the specific character of the learner and of the specific nature of the learner's experience."[3] Further, they recommend that the counselor concern himself with the individualized design of learning experiences for some students or perhaps small groups of children from certain types of disadvantaged backgrounds. It seems that the first step in helping them to eventually help themselves is learning they can see as meaningful. Rather than simply emphasizing a change in attitude, it seems that greater cooperation from the students and from their families could be achieved if they could see the school as an ally rather than an antagonist. This can lead to reciprocally helpful relationships. As the counselor gains their confidence, he can gain in his understanding of them and may eventually be able to establish a truly effective helping relationship.

Jacobs, coordinator of the Higher Horizons Program in New York City, listed as one of the functions of counselors the inculcation of the staff with a healthy disrespect for the results of verbal I. Q. tests. Since these are really tests of what has been learned and not of what can be learned, they can place the already disadvantaged child at an even greater disadvantage if they are afforded too much importance.

The tendency is still to use test data to classify students rather than to add to our understanding of them. On the basis of test scores alone, far too many disadvantaged youth are placed in classes for mentally retarded or slow learners. A numerical score alone says nothing about the person and his background, and the counselor is the person who has the unique position of being able to fit together the many pieces of the puzzle that make for a more coherent picture of the individual, his background, and his school record.

By using a variety of performance, aptitude, observation, and discussion data to help fill gaps in his information about and knowledge of the individual, the counselor is in a much better position to help others in the educational and community setting to understand and help. Acting as the hub in a wheel, he is able to turn in the direction of the school social worker who can then check out the student's home situation and in the direction of the psychometrition and psychologist who can determine, administer, and help interpret tests and test scores that may be more revealing of the student's true potential than those normally used in the school testing program.

Marsh, manager of the Fresno, California office of the State Department of Employment, reported that they altered batteries of the General Aptitude Tests to reveal aptitudes not revealed by the traditional batteries which were on a verbal level beyond that of the members of the minority groups they were testing. The result has been that many workers have been placed who would not have been otherwise and others have been channeled into Manpower Development Training Act programs and, subsequently, into jobs. Because of the success of some of the minority group members, others have been encouraged to seek the help of the employment service.

The area of testing has undergone a great deal of research in an effort to determine whether or not there is such a thing as a culture-free test of intelligence. As a result, the idea of the possibility of eliminating cultural contamination from measures of intelligence has been abandoned. Culture-fair testing, however, is still accepted as a method of group comparison. The trend now is to take cultural factors into account in test construction and prediction.

All disadvantaged children do not fall below the tested intelligence level of their advantaged peers. This has stimulated researchers to study environmental factors which may account for the ability of some to succeed. When given similar degrees of cultural opportunity to realize their potentialities, the members of each ethnic group have very much the same average achievement. If all environmental opportunities are taken into account, tests show basic similarity in the mental characteristics of all human groups.

Realistically, we know that special programs for the disadvantaged, providing sufficient counselors for working intensively and extensively with them, cost money.

What is being done? What are practitioners doing on which we can build? In The Disadvantaged and Potential Dropout, Fox describes what he terms a patron-therapy system. This is similar to what some communities have termed the "Big Brother" program. In the patron-therapy system, a psychologist to whom a child is referred may decide that more than anything else he needs a friend who can be understanding and patient and have no less than three hours a week to spend with him. The patron records how the time is spent and the reactions of his young friend. At intervals, the patron meets with the psychologist for discussion and instruction. (The patron is carefully screened by the psychologist who has the particular needs of the child in mind.)

Because counselors working with the disadvantaged must reach out to students and parents and actually try to create a demand for their counseling services, more than one-third of all New York State counselors have evening office hours. It is easier for parents who are not used to appearing in school to go there, because they do not have to push their way through the crowded halls and feel the scrutiny of hundreds of eyes. This also may be true of the students. It is particularly true in a school setting where going to the counselor's office has only been associated with being in trouble or, at least, something undesirable.

With President Johnson's War Against Poverty, changes have taken place in what we thought of as the function of the employment service. It is now an employment counseling service as well as simply a place where one learns of possible job openings. Today, employment counselors are faced with the task of testing the untestable, educating the uneducable, and finding employment for the unemployable. Fifty percent of the staff of Youth Opportunity Centers are counseling personnel challenged to recruit, motivate, counsel, test, place, and follow up the youth so in need of help in finding a place in the world. To fill the consequent counselor shortage, the Bureau of Employment Security initiated the Project-Counselor-Advisor University Summer Education (CAUSE) program. An eight to 10 week training session prepared 1,750 counselor aides or youth advisors. The majority of these people have been given further on-the-job training by the state employment security agencies hiring them.

Realizing that so many who need their help are not the kind of people who seek them for aid, these agencies have reversed the process and sought out disadvantaged unemployed youth. Pilot projects are trying to discover effective ways of administering work tryout evaluations for these youths. Adjustment counseling, necessary to helping disturbed youth, has required the additional help of public and private welfare agency counselors. It requires and will require enthusiasm, energy, and dedication to reach these young people and begin to meet their needs.

The McAteer Act as amended in 1965 authorized the establishment of a two year pilot project in compensatory education. Its purpose and goal have been to discover methods of encouraging culturally disadvantaged students to remain in school until graduation. The idea of compensatory education is to fill the gaps in experience and skill which are real obstacles to the motivation, further learning, and job placement of the disadvantaged. It seems that successful programs attack the problem on three fronts simultaneously by demonstrating a close relationship between the classroom and life, by providing remedial and enrichment experiences requisite for academic and social success, and by arousing aspirations enabling a pupil to establish constructive and positive goals.

Approaches for implementation include small classes, remedial instruction, enrichment experiences, enlistment of parent support and establishment of a cooperative working relationship, extended and intensified guidance and counseling, enlistment and development of community resources, flexible class and facility arrangements, staff orientation and training, preschool and parent education, emphasis on language skills, tutorial instruction, and extra library facilities.

Results thus far in the 24 pilot projects have been encouraging, and everyone involved has profited in attitude, techniques, and experiences. Counselors have been encouraged to set up demonstration pilot guidance programs, to use developmental and preventive, as well as remedial, program approaches to explore and experiment with creative and innovative guidance programs, and to coordinate the programs of student personnel services.

The Higher Horizons Program in New York City is probably one of the best known efforts to provide more extensive guidance services from kindergarten through the twelfth grade through expanded guidance and counseling staffs and programs, remedial services, parent contact, and an enriched program both in class work and cultural experiences. The Project Opportunity portion of the Educational Improvement Project was modeled after the original Demonstration Guidance Project from which the Higher Horizons Program grew. It dealt with disadvantaged students chosen from the top 10 to 20 percent of their classes in a number of southern communities. Another program of this type was the McFarland Roosevelt Guidance Project in Washington, D. C. It followed a group of 150 selected students from the seventh grade through high school. The object of the program was to determine whether extensive and intensive guidance and opportunities for enrichment and remedial work would enable children from disadvantaged backgrounds to develop their talents more fully. They were helped to analyze and understand their own abilities and to make school course and career choices based upon this understanding.

The goal of a six weeks Guidance Institute in Fayettsville, Arkansas, was to provide educational and cultural enrichment for seventh, eighth, and ninth grade students whose school performance had been decidedly substandard. An interdisciplinary approach was utilized, and the six permanent personnel work groups used included a counselor, a master subject area teacher, an activities specialist, a special service worker, and four teacher-counselor trainees. This setup promoted better communication between members of the staff from all disciplines and helped the staff gain deeper insights into the needs of these experientially deprived students. Group guidance sessions were daily affairs, as were guidance training classes with the teacher-counselor trainees.

The significant growth in reading indicated that one of the major objectives of the Guidance Institute--to raise the achievement level of the participants--was attained. The reading specialist credited much of this growth to a greatly improved attitude on the part of the students. Another goal--that of improving the self-concept--was attained at the .05 level of significance as measured by pre-and post-tests.

In White Plains, New York, a project with junior high school students from low socioeconomic or culturally different backgrounds used extensive and intensive counseling. Grades, study habits, and citizenship improved significantly. The counselors agreed that work with these types of students should be combined with work with the family and individual and group counseling in order to maximize benefit to the students.

Sebald's report on the project on Out-of-School Clinical and Guidance Centers for Disadvantaged Pupils in Non-Public Schools emphasized the satisfaction of the staff with and the effectiveness of the interdisciplinary approach used. The consensus of opinion seemed to be that the staff had an opportunity to really become acquainted with the students, to serve them better, to become more flexible and skillful in their work, to feel a far greater sense of unity and cooperation, and to desire the same approach in their own school settings.

As Gordon and Wilkerson point out, programs for reading improvement and some form of guidance are almost "universal components in projects for the disadvantaged."[3] There is more emphasis on early identification of children who are disadvantaged or seem headed for later problems, and elementary guidance is becoming more widespread. Some schools have set up adjustment counseling programs at the elementary and junior high school levels to work with students who seem to have environmental, emotional, and behavioral problems. The counselors visit the homes in an effort to work with family problems or to make referral to a social agency. Though these programs are not aimed specifically at the disadvantaged, children from disadvantaged backgrounds make up a sizable percentage of those involved.

Recognizing that guidance, to have any effect at all, would have to be more than a scheduled appointment once a semester, many schools have hired additional counselors, have given the counselors help in the form of nonprofessional aids, and have provided more psychologists, psychiatrists, and social workers to help in depth therapy and in making necessary contacts for the student's welfare.

It is well that schools have become more aware of students' needs in the vocational sphere. This is true for all students but is more important for the disadvantaged who more often than not do not receive encouragement and information from anyone if they do not receive it from the school. There is tremendous need for allowing time for vocational exploration to be pushed back into elementary school. Children are interested at an early age in what they will do when they grow up, and we are selling them short and not taking advantage of this natural interest when we delay their exploration as long as we do. In addition to vocational exploration, there is another very important skill that we must help inculcate in students, and that is the ability to adapt. As Gordon and Wilkerson advise, political and social scientists predicted in 1964 that within a 10 year period not only must individuals be prepared to change vocations or, at least, jobs within vocations five to six times during their working years, but leisure time will also become a problem because we will have so much more of it. The prediction is that this will be no problem for the professional person--he may be businer than ever--but it will hit, and hit hard, those people who have never learned how to manage knowledge or how to find satisfaction, ego-satisfaction, in channels besides productive work and perhaps never even in productive work. We have before us an awesome challenge.

Strite, the director of a project on dropouts, says:

> These youngsters are alien to the prevailing social structure, alienated by vicissitudes of their environment and experience.
>
> No human being ever performs to the top of his capacity unless the discipline, the motivation, is an internal one, self-directed. What we in essence are doing is redirecting the personality goals and conduct into constructive, productive channels, developing coping skills so that the individual may adapt himself to the demands of society rather than continue a pattern of futile and self-destructive assaults.[4]

Three basic assumptions underlie the project:

1. These students are basically capable of responsible, self-determining behavior. If given the opportunity, they will be able to overcome or, at least, diminish whatever cultural, educational, or environmental deprivations they may have suffered previously.

2. A counseling relationship is offered that will provide these students an understanding and a concern for them as persons and aid them in developing insight as to responsible conduct in meeting their problems.

3. A special classroom situation is offered which will afford these students the opportunity to begin where they are and progress at a pace commensurate with their individual ability and need.

After the first semester in the ninth grade, the eligible students who want to take part, because it is voluntary, are formed into groups which meet daily for group counseling. Each one is encouraged to understand the influence of his past experiences in making him what he is. Problems dealt with develop out of daily crises and emergencies at home or at school and include concepts of inadequacy, feeling "dumb" or different, frustration and defeat over low grades and failure to achieve, negative reactions to school and personnel, and fears and negative attitudes about the future. Opportunities are available for individual counseling as well.

Tapes of the group sessions are helpful in studying group dynamics, in training personnel on the project, and in demonstrating certain aspects of the program to the regular staff. The special classroom work emphasizes English and social studies and is in no way like the formal classroom work to which the student has reacted negatively. He is given more responsibility for his own choices of material and is helped to see what is meaningful to him as an individual. Rather than being marked in the usual sense, he is given credit for growth in academic work or attitude. Strite works closely with the teachers who work with these groups and helps them interpret the significance of behavior.

The consensus of opinion is that one of the keynotes of working with youngsters of this type is complete honesty--giving them the feeling of acceptance and making them aware that there are adults who will go to bat for them in a crisis. It is, therefore, not so much what the student achieves as how he achieves it--his attitudes and methods of approaching a goal.

Vontress works in Crispus Attucks High School--an all-Negro four year high school with 2,400 students. Located in the inner city of Indianapolis it is an example of de facto segregation. In 1958, the principal of the school, himself a former counselor, determined to update the guidance program. This updating took the form of the type of innovation that may well eventually be the long, slow road that we must all experience if we are to reach and hold culturally disadvantaged pupils. Inservice training programs worked not only on counseling approaches to be used with the students but also examined the school's philosophy and curriculum, investigated community needs and attitudes, and planned how to involve the community in the planned changes. One special counselor was assigned to help students find and keep jobs and another to counsel both students and parents on colleges, scholarships, and loans. Two social service workers made home contacts if the counselor could not. A teacher was assigned to special publicity to let the community in on what was going on. A special "dropout" counselor acted as a school-community liaison. Another counselor worked with students who worked parttime. The jobs these students had gave them day-to-day interaction with people they had not had previous opportunity to contact. Fraternities, sororities, and student teachers aided immeasurably in the effort.

In the seven years from the initiation of the program in 1958 to Vontress' report, the average Otis I.Q. rose from 89 to 94, the percentage of failing grades dropped from 45 to 35 percent, the dropout rate dropped from 56 to 40 percent, and the graduates enrolled in some type of formal education beyond high school increased from 18 to 39 percent. For those not acquainted with the gigantic problems that have grown up over decades, these figures may seem like small gains. There is no universal panacea for these problems, and the gains are going to seem small for all the work, effort, and planning--blood, sweat, and tears, if you will--that they are going to require. But imagine for a moment, if you will, what *could* possibly happen if communities throughout our nation would be willing to tackle this seemingly astronomical task as did this one community and these farsighted individuals. As Vontress pointed out, the counselor becomes a social worker, a public relations man, and a catalyst for social change. If counselor education programs were expanded to allow for classes that would provide the counselor-in-training with a background for understanding the disadvantaged, if the counselors were fresh from the juvenile court and from schools in disadvantaged areas, if internships were established for working with agencies confronted with the disadvantaged and their problems, it seems possible that the emerging counselor would be better prepared for the problems that face him.

If these counselors upon completion of masters degrees were to go into schools at all levels--elementary, junior high, high school and perhaps pre-school--and to work most intensively with those identified as disadvantaged, we would have the foundation for much research that might allow a few more pieces to be fitted into the giant puzzle over which we hover.

Those who have worked as counselors with such projects as the Neighborhood Youth Corps give a realistic, eye-opening, and challenging picture of working with disadvantaged youth. In the first place, they do not voluntarily seek out the counselor. A large percentage of them have police records and have been ordered to a counselor by their parole officers. Many of them are school pushouts or kickouts whom the school staffs and administrators were glad to be rid of because of their troublesome and disruptive qualities. Some of them have jobs--but not the type of job usually respected or even considered legal. They may be connected with the drug industry, entertainment industry, or a racket.

Many of these counselors react hostilely toward the counselor, but hostility, strange as it may seem, is a healthy and appropriate reaction in these situations. The really disturbing counselees are those who are simply "there" or, in some cases, not even "there" because they are not sufficiently autonomous to even seek the type of trouble seemingly sought by the hostile. They are the ones who have been disadvantaged to such an extent, have been kicked about so long, and have been told and made to feel that they are so utterly worthless, that they can no longer even feel hostility.

The spread of this lethargic disease, moreover, has even caused a change in the types of gangs existing in large cities. There has been a decline in the conflict type of gang; and although the new gangs do not cause trouble in the streets from the health and rehabilitation point of view, they cause even greater problems because these are the ones that seek escape through drugs. They are not at Youth Opportunity Centers, because they are perched on their hallucinatory cloud or seeking a way of buying the means of reaching that cloud, and the Youth Opportunity Center jobs do not pay that kind of money. Still another disadvantaged counselee may be a representative of a well-organized group which is basically at war with the establishment or the level of society which the counseling service represents to him.

These are representative samples of counselees faced by the counselor in these settings. What kind of counselor is most effective in working with them?

It would be easy to become so enthusiastic about the features of guidance programs for the disadvantaged that we overlook the ingredient without which the finest program would fail to achieve its potential. Not all counselors are qualified to work with the disadvantaged. It requires more than academic training, more than certain credentials. It requires counselors who have developed and achieved some insight into their own attitudes, prejudices, and motivations. Because many of these students have had undesirable experiences with counselors, they are not likely to accept and respect other counselors without putting them to the test, and they are quick to spot a "phoney."

Rousseve approaches the problem from a grass roots level. To put the matter in unmistakeable terms:

> Our professed concern for equality of educational opportunity, our professed belief in the changeability of human behavior, and our professed respect for individual worth require that programs designed to prepare school counselors to function effectively in contemporary American society be reshaped to include realistic learning experiences pertaining to facilitating the more extensive acculturation of the culturally isolated youth within our communities. If it be true that the most rewarding kind of counseling is based in large measure upon the counselor's empathic understanding of the counselee's feelings and personal meanings, it soon becomes clear that our traditional patterns of counselor education leave much to be desired regarding our wherewithal to help the culturally alienated youth within our respective schools to modify their outlook.[5]

He goes on to cite a study conducted in Los Angeles that pointed up the fact that white counselors were markedly ineffective with the Negro students assigned to them. The lack of ability of the white counselor to indentify with the Negro counselee made a counseling relationship between these two parties difficult to establish. The implications for counselor education are plain:

> Without a carefully planned opportunity to come to grips with the inner world of rejection which the culturally isolated youth in our society is heir to, how can the counselor-in-training possibly come into possession of those resources required for the successful counseling of the legions of alienated young Americans all around us?[6]

It seems that if counselors are to fill an adaptive function in the school community setting, they must be exposed much more extensively to up-to-date scientific findings in cultural anthropology and related fields. Traylor, Los Angeles Director of Youth Training and Employment Projects of the Youth Opportunity Board, indicated that the challenge is to select staffs made up of persons who: 1, are sympathetic and understanding of the problems of the disadvantaged--including minority group youth--and, having this understanding, can "respect" them as deserving human beings; 2, can communicate with disadvantaged people--youth and parents--without fear or paternalism or ambivalence of roles; 3, can let themselves experience positive attitudes toward minority and poor youth which reflect warmth, caring, liking, interest, and respect; 4, have a genuine desire to see disadvantaged youth in terms of their problems, needs, and potential, rather than in preconceived notions of inferiority, the stereotype, and limited potential; 5, can permit disadvantaged youth to be individuals and free from the threat of external evaluation, while conveying to them that the "expectation level" for them is not limited because of their present status or condition; and, 6, can question the importance or validity of what they "know about the disadvantaged"--the poor, the Negro, the Mexican-American--and be willing to absorb new learnings which come from the enriching experience of working with disadvantaged people.[7]

Love, Chief of the Compensatory Education Program Development and Special Consultant for the Bureau of Pupil Personnel Services in California, has indicated some thought-provoking questions that some middle- and lower-class minority group parents are asking. These include:

1. Do counselors know about job opportunities and financial aid for minority students?

2. How are counselors trained and selected?

3. What training do counselors receive in integrating cultural differences or intergroup relations?

4. What kind of counseling is offered to newly integrated student bodies?

5. Are there special counseling programs for the potential dropout?

6. Why do many minority students appear shy about seeking counseling assistance?

7. Why are some parents reluctant to visit the school?

8. What kinds of positive meetings are available for parents and counselors?

9. Why do some counselors and teachers feel uncomfortable in talking with parents from low socioeconomic backgrounds?[8]

These seem like very fair questions and ones that we, as counselors and/or counselor educators, should be asking ourselves. The majority of us, if honest, might not feel at all satisfied with the answers we are able to give.

The school counselor is likely to be confused when he discovers that usual concepts and methods are ineffectual in working with disadvantaged counselors, and he must prepare for de-incapsulation from his middle-class cultural cocoon. Many of these people dislike "talk" unless it is related to action and experience. They are not used to talking about feelings--they are used to expressing them directly and spontaneously. Verbalizations surely do not exhaust the possibilities for the expression of feelings; however, before true communication can occur, there must be understanding. Disadvantaged counselees are apt to be less introspective and to blame forces outside themselves for their difficulties, and they are less apt to seek counseling. In this area, there is need for research on how to motivate these people to seek counseling when their life style is not consonant with such seeking.

In dealing with these clients, group counseling may be part of our answer. More normal peer interaction allows them to be more themselves than in the one-to-one counseling relationship. Also, role playing as a means of behavior modification should not be overlooked as a counseling device in working with the disadvantaged. Role playing seems a natural concommitant with the action oriented style of the disadvantaged who are more comfortable with a focus on external action which can serve to stimulate introspection. It can reduce the role distance between the counselor and client, and it can serve to bring the impersonal, foreign world of an institutional setting within the focus of the known. Furthermore, it seems to be conducive to the development of verbal and leadership skills and the informality of role playing allows a reduction in tension and an atmosphere in which the counselee can experiment with different behaviors without threats.

When discussing counseling the disadvantaged, the question that always seems to arise is that of values. Is it inevitable that the counselor attempt to impose his middle-class values on the counselee or that these values constitute a psychological barrier between the two? Can the counselor be at all successful in attempting to operate within the counselee's value system?

Rogers postulates that the individual learns very early to distrust his own feelings because of the values others have imposed upon him. Therefore, if the counselor can enable the counselee to experience his own organismic value processes, it is possible that there will be more universality in values. Rogers explains this as follows:

> A corollary of what I have been saying is that in any culture, given a climate of respect and freedom in which he is valued as a person, the mature individual would tend to choose and prefer those same value directions. This is a significant hypothesis which could be tested. It means that though the individual of whom I am speaking would not have a consistent or even a stable system of conceived values, the valuing process within him would lead to emerging value directions which would be constant across cultures and across time.[9]

This, of course, is not possible in anything but an atmosphere of unconditional acceptance and regard which allows the client to feel worthwhile, capable of being responsible for himself, and in the process of becoming rather than being already classified and pigeonholed.

The counselor is in a position to help others in the school setting better understand and more effectively work with disadvantaged students. Because of the defeating experience school has always been for them, their attitude toward school and behavior in the classroom often cause their teachers to think of them only as disruptive influences. Moreover, this type of attitude toward them can succeed only in causing greater self-dissatisfaction that is expressed outwardly in hostility, aggression, or withdrawal. So the vicious cycle goes on unless someone, and this someone can most readily be the counselor, is willing to learn to know and to understand the individual underneath these overt manifestations and to direct his concern and skill toward making the student see himself as a more adequate human being.

Since the initiation of NDEA in 1958, counselor education programs have grown rapidly. Perhaps partially because of this rapid growth, there are preparation programs that teach about counseling rather than how to counsel. Techniques and facts are not enough, particularly when the counselor is dealing with the disadvantaged potential dropout. Stripling probably did well to place part of the responsibility for inadequate preparation upon counselors and counselor educators. Until very recently, with the preparation of standards by the Association for Counselor Education and Supervision (ACES), criteria had not been set forth that could help university administrators judge the quality or adequacy of counselor educator programs.

Stripling points out that undergraduate work in education and the behavioral sciences would provide the person looking forward to graduate work in counseling with a far more adequate background for understanding the importance of the individual's cultural background. Graduate work that furnishes background for understanding social and economic pressures and their influence on self-concept, motivation, and aspiration, psychology classes in personality and in learning, theoretical and philosophical bases for various approaches and understanding in guidance, personal counseling that provides the counselor-in-training with knowledge of himself and his own motivation, and actual experience in practicum and/or internship would equip the counselor far better to cope with public school problems.

Preparation for working with the other members of the student personnel team, as well as with community agency resource people, is also seen as a necessity by Stripling. Seminars and supervised experience appear to be the ideal way of affording this experience.

It has been the observation of the directors of the Youth Opportunity Center that sometimes the more professional the counselor becomes, the less patience he may have with the actions exhibited by those whom he feels his expertise as a counselor should be able to help. This may be particularly true when he feels physically endangered in the area in which his work center is located. Some who have become concerned with this problem have recommendd hiring as many counselors as possible from the groups represented by the counselees or clients. This sounds like an excellent idea, but the dearth of available counselors with such backgrounds would pose a definite problem.

Three developments have and will make even more difficult the problems of education. One of these is the explosion of knowledge. New discoveries and advances are now so rapid that we can count on our information in some areas to be accurate for only a relatively short period of time. As knowledge expands, the distinguishing lines between disciplines tend to disappear. Thus, the interdisciplinary approach to the problems of education is going to become increasingly important.

Another development that has had tremendous impact is in the area of technology. Cybernetics have given skill to the machine which previously possessed only power. Predictions are that in a little more than 10 years, two percent of the population will be able to produce all that the other 98 percent can consume. In short, we must prepare ourselves for the problems these developments will bring to helping the disadvantaged find places for themselves.

Perhaps to those in the behavioral sciences, a third area of development is the most crucial. It concerns the political, social, and economic relations which have taken place within not only the past two decades, but within the past six months. Forms of destruction so formidable that their use could mean the annihilation of humanity, the rise of underdeveloped nations, and the civil rights and human rights revolts, all have made us aware that we cannot sit back and hope for masterminds to come forth with a magic formula that will fill everyone with a desire for knowledge and a real feeling of humanism for his fellow man. Rather, we know that we must start educating in this direction, and it is educating the disadvantaged student that will require particular emphasis. With the vast amount and rapidly changing knowledge available to us, we must focus on the process of learning to learn as a lifetime activity and on the skill of the management of knowledge. The information systems that are becoming a part of the many disciplines are a step toward this management. An extremely important part of the new look we must be taking is in the area of understanding, competence, and skill in the handling of interpersonal and intrapersonal relationships--we must be concerned not only with how to effect them but also with how to teach others to effect them.

From a research standpoint, one of the most critical issues we face has to do with whether the service, treatment, or training has been the causal agent of observed change.

There is a tendency to select the individuals who are most apt to benefit from the treatment or training or service. Selection and/or sampling must be random.

Pressure often seems to pervade for positive findings. In the true spirit of scientific inquiry, researchers must think in terms of experimenting with and presenting an idea for research in this light. Because of the difficulties in controlling variables, much of the research in the behavioral sciences is field research rather than experimental research.

Behavioral researchers are urged, however, to use control groups in their research because it is much more difficult to attribute change to intervention or treatment without such a group. They are also urged to not overlook contributions to the theoretical literature, because they may have implications for further investigation and practice.

Levine reported that he found very few studies in his review of the literature pertaining to physically, emotionally, or socially handicapped individuals that used a triple classification analysis of variance design in which age, degree of "deprivation," and various programs, including no program, were analyzed simultaneously.

Emphasis has been placed on being aware of and dealing with the reality factors of disadvantaged individuals' lives. Those who work with them are urged to consider the "whole individual." His physical, emotional, and social problems--including economic matters--and his inter-personal relationships cannot be adequately handled without realizing the interdependence of the various areas. Improvement in one area is often dependent upon improvement in others.

Levine brought up the well-known, but too little considered, fact that it requires knowledge of the general laws of behavior to understand the special characteristics of the individual and his needs. Simply because an individual seems to fall within a certain category does not mean that the same counseling procedures can be used with him that are used with others within the same category. He emphasized the importance, too, of the interdisciplinary approach. Problems like those faced by the disadvantaged are more effectively attacked by the coordinated efforts of the personnel team, the educational staff, and the community.

Levine also makes the point that there is a great distinction between attempting to define what is existent in society at a given point in time in view of occupational opportunity and attempting to define what constitutes reality for the individual. In other words, training programs must be geared not only to the needs of society but also to the needs of the individual. With technology changing and advancing as rapidly as it is, these programs must be forwardlooking and future oriented. By the same token, rather than reflect on the person's incapabilities, the personnel workers must think in terms of his potentialities.

Levine indicated that, in spite of the fact that the relationship between failure and damage to the personality is mentioned frequently, at no point in the literature did he find a systematic treatment that considered the relationship in terms of: 1, the point in the life cycle at which the supposed failure occurred; 2, the actual perception on the part of the individual as to whether or not he had failed and the meaning of such failure to him; 3, the basic personality structure, which has many resources for integrating failure as well as for utilizing success; 4, whether or not the failure permanently assigned an individual to a category that is devalued in the society; 5, whether the failure could be coordinated into the individual's life style in such a way that he utilized it as an experience and proceeded from that point on; and, 6, the environment within which the individual developed--the opportunities which it afforded him to expand his experiences and to develop his potentialities. Because failure is related to aspirations, expectations, desires, wishes, and fantasies, what constitutes failure at one level of culture may not be so perceived at another level.

Hamburger has many suggestions for needed research on the disadvantaged. According to all the results we have, even with biased I. Q. tests, there is already available a considerable amount of talent even in the most underprivileged groups. What we need to know is how this happens. How do people who come from the worst circumstances manage to emerge with such high I. Q. 's? This points very clearly to a greatly detailed and refined approach to research on the process by which people learn or unlearn:

> What we do not have at this point is very much on process. We don't have very much on dynamics. We do not know very much about the dialectics of deprivation.[10]

Hamburger goes on to point out that as guidance workers, we are concerned with development--providing tools and equipment which will enable people to develop new characteristics. If they are able to make differentiations in their environment and to integrate kinds of behavior that will move them ahead to new experiences and new characteristics, they will be able to develop new ways of dealing with life. The resulting new experience will be the key to continued growth.

Hamburger takes the view that rather than enter into their phenomenology, we must assault it; rather than be nondirective or role play, we must use positive intervention. We must make them want to change instead of trying to change them. When we have a deeper understanding of what the variables are that produce success as well as failure, we will be in a position to work with the process, the dynamics. The interaction in which we engage with them must be "consciously and cognitively directed to the real conditions of their lives."[11]

It seems, then, that much of the problem is in interpreting the conditions of his life for a child. But how do we make him understand the conditions that affect his life and yet develop in him a sense of accomplishment and dignity that seems basic to his establishing truly meaningful goals for himself? To accomplish this, we must be more than behavioral scientists--we must also be socially responsible and intelligent citizens.

Some of the research data collected by Deutsch indicates that children from lower-class environments at the first grade level show a great deal of fantasy and are superior in some respects of their production and handling of it to children from more privileged backgrounds. However, from the first grade on something happens to constrict and stifle this creativity and openness. The interaction between the experiences in school and the general condition of life seems to serve as a powerful depressant.

Deutsch studied the effects of two variables: 1, the absence or presence of the father in the home; and, 2, the existence of nonexistence of any preschool experience. The children lacking both of these showed a substantial decrement in I. Q. level between the first and fifth grades. Deutsch associated this with the number of interpersonal interactions, opportunities for conversation, and opportunity for varied environmental circumstances.

By identifying more of these deficits we may be able to take steps to correct or alleviate at least some of them.

Another area for the counselor's attention is the stimulation of interest in college attendance in the able disadvantaged student. The Cooperative Motivation Program in Providence, Rhode Island, emphasizes college orientation and includes visits to colleges combined with group guidance in which members of the college faculty participate.

We are pleased to report that this type of program and research is receiving the next necessary step in its growth. A very new research project will very shortly be underway at the University of Michigan. Its objective will be to determine what is being done for the disadvantaged student at the college level. Its initial concern will be a definition of the culturally disadvantaged. Investigation will proceed to a description of pupil personnel services in existence. The last phase will attempt to measure the effect of pupil personnel services on the culturally disadvantaged college student.

If wisdom is the knowledge of our own ignorance, then indeed we can lay claim to being wise. There is so much that we do not know and so much that stands in need of research in the area of counseling in general and in the area of counseling the disadvantaged in particular.

As Gordon has pointed out, ". . . We are. . . not certain that we know how best to counsel, or that counseling is our most effective tool of guided behavioral development and change."[12] We are not sure that what we do in the counseling relationship is meaningful in the life of a child whose conditions of life deny at crucial points the validity of democracy's promise and humanity's hopes. . .
If we are lucky, he may see in us a speck of humanity with which he may identify and use as a model. Or, we may be able to help him gain insight into the ways his own behavior helps to defeat his purposes. But those who have worked with these children know that once the process of social maladaptation has begun and is consistently reinforced by negative life experience, our successes are the exceptions rather than the rules.

If this is the case, surely it behooves us to undertake research involving longitudinal studies starting with preschool or kindergarten children from disadvantaged backgrounds. If we cannot begin that early, at what point in their lives can we substitute positive reinforcers for the negative reinforcers that have served to help them learn social maladaptive behavior? As Wrenn so succinctly states, "A person can learn a new behavior pattern if successive approximations (or movements) toward it are reinforced."[13]

In the counseling setting, we can make certain that individuals are positively reinforced, but what of the outside world? Can we, in some way, build reinforcers into their life experience? If not, after being positively reinforced in a counseling program, how does the student cope with failure in the world outside?

Since the same procedures will not accomplish certain goals with all kinds of students, the counselor needs to conduct research on what methods or processes work most effectively with various types of students. We have long hidden behind the plea that there are so many uncontrollable variables that it is impossible to do productive research. True, there are infinite variables in anything having to do with behavioral science; but if we take one method, one procedure, and make clear that this is the limit we are researching at one particular time, bit by bit we may be able to make inroads into the vast unknown of counseling.

The CASE projects (Contingencies Applicable for Special Education), have made wide use of reinforcers. These often take the form of points that can be used to buy goods or services. Other reinforcers include such things as praise or commendation, food, money, or gifts. These reinforcers must be contingent upon a particular performance, and they must maintain the performance. This, of course, is a behavioral psychology principle and could be the basis for some challenging research. For example, it would be helpful in work with the disadvantaged if we knew the dynamics that permit one child to begin to behave as well with an intangible reward after having received a tangible one, while another child with the same background and apparently the same ability, still requires the tangible reinforcement.

We might also direct our thinking toward investigating various possibilities that might hopefully guide us to results that would help us in developing counselor education programs which would better prepare counselors to work with disadvantaged people.

There seems to be a logical trend emerging in the area of student personnel work and one which would lend itself to research. This trend is toward the interdisciplinary approach. Counselors, school social workers, school psychologists, psychometrists, and nurses often work with the same students. It is easy to duplicate services or to leave gaps. Tannenbaum has pointed out that:

> . . . guidance counselors, social workers, attendance teachers, and school psychologists are sometimes so involved in picking each other out of their hair that the clients to be served somehow slip by untouched by their professional hands. The result is often a mutual distrust and a jockeying for power among the services. I sometimes think that if an efficiency expert meshed together their services into a well-oiled program, far more students might be reached at a far lower cost in manpower.[14]

This opens a whole new area that will require research. The logical place to begin this interdisciplinary approach is in counselor education. At present, the various departments training people who later become members of the pupil personnel team make little attempt to coordinate their efforts.

Reflecting concern for this lack of unification, the Interprofessional Research Commission on Pupil Personnel Services (IRCOPPS) was formed and in 1962 won a grant from the National Institute of Mental Health for a five year research program to investigate some of the basic questions in pupil personnel services. The IRCOPPS projects have only very recently been completed. Their results may aid us in working toward better coordination of the various disciplines.

In all the areas of pupil personnel specialization, it seems that there is a necessity for a rather thorough grounding in child development. Perhaps a core course of this type would serve as a starting point for a common base for the interdisciplinary approach.

It seems possible to initiate a pilot program involving special course work in the anthropology and sociology of the cultures of disadvantaged groups, internships with agencies dealing with the disadvantaged, and practicum experience utilizing youth from juvenile courts and juvenile homes or from schools in particularly deprived areas. Criteria could be established to attempt to measure the effectiveness of counselors receiving masters degrees from this especially tailored program as compared to those from a program without the emphasis on the interdisciplinary approach in understanding the disadvantaged. Experimenting with various combinations of such a special program could also yield interesting results. For example, practicum experience with disadvantaged students could be compared in effectiveness with the program entirely oriented toward the disadvantaged and also with one with no special orientation.

With the increase in elementary guidance, there are great possibilities for longitudinal studies. Identification of the disadvantaged can be made at an early age. An experimental and a control group could be followed throughout school life, and if possible, until three or four years beyond high school. Comparisons at designated times could be made on: 1, school success; 2, offenses against the law; 3, emergency leadership; 4, continuing education; 5, vocational choice; and, 6, ultimate vocation.

Intervention studies at the junior high school and early high school levels could yield results that would alter our counseling approaches. Some counselors with strong backgrounds in understanding the disadvantaged could work directly with disadvantaged students in both individual and group counseling. Other counselors with equally good backgrounds in this area could work with teachers rather than students. If teachers could be helped to understand the disadvantaged students and see them as worthwhile human beings with potential to the extent that they were able to convey this to the students, it may be that the resulting relationship would be as effective in helping the student's self-concept and opening doors for higher aspirations and increased interest in learning as the counseling relationship.

We also need to know more about the individual in counseling as opposed to group guidance with the disadvantaged. In individual counseling, if a counselor understands and can truly empathize with the deprived student, can he be as effective as a counselor from the counselee's own ethnic or cultural group?

The fascinating area of personality dynamics needs a great deal of research. It would help tremendously in working with these students if we knew the variables that have a part in the success of one and the apparent failure of another from, seemingly, the same type of background.

Exciting, frightening, humbling, challenging--these might be descriptive of our feelings as we realize both the necessities and possibilities for research facing those who have chosen to dedicate themselves to the profession of counseling. If this challenge is to be met to any degree, it is going to require that we educate, hire, or be, depending upon our position and setting, the kind of counselors who are willing to dedicate themselves and to become involved. Personal growth, as well as the counseling process, is developmental and demands that we read and reevaluate, research and reevaluate, over and over again.

The field is unlimited, and the boundaries are where we place them.

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EDUCATIONAL REHABILITATION THROUGH FAMILY AND COMMUNITY

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FAMILY AND COMMUNITY AS BARRIERS TO EDUCATIONAL ACHIEVEMENT

Until a few years ago, academic failure was commonly attributed to intellectual or psychological deficiencies within the individual. The poorly performing pupil was commonly diagnosed as one who had either limited intellectual ability or emotional barriers to learning. As data have begun to accumulate showing that academic failure is especially high among low-income and minority groups, however, the explanations have become more sociological. In general, these explanations view educational failure as a natural consequence of deficiencies in the family and community life of slum children. They are characterized by five general themes:

1. Slum children tend to be withdrawn and uncommunicative.
2. Slum children react with hostility toward authority figures.
3. Slum children have difficulty adjusting to classroom routines.
4. Slum children have a dearth of educational experiences prior to entering school.
5. Slum children are poorly motivated to do well in school.

For the purposes of this discussion, each of these themes needs additional comment:

Withdrawn and Uncommunicative. The first theme--that slum children are withdrawn and uncommunicative--is based upon the premise that many low-income children come from homes in which the parents believe in the old adage that "children should be seen and not heard." When a child from such a home comes to school, it is argued, pressure is brought to bear upon him to do more than sit and be still. Until the child understands that communication from him is required, learning cannot take place.

Hostility to Authority. The second theme springs from the observation that there are children in the school situation who seem to be angry at everything and everybody. It is thought that this behavior is due, in many cases, to lack of close parental care. Inattention to the needs of children, it is argued, stems from the parents' preoccupation with trying to obtain the minimal necessities of life. The child has an innate craving for love and affection which, when met, produces a feeling of security and well-being. When it is not met, this craving is replaced by fear and insecurity. A common reaction to such feelings is hostility--that is, the child will try to prove that he is not afraid by showing how tough he is. Such children disrupt orderly classroom procedures and, through threats of violence to pupils and teachers alike, create a tension which is inimical to learning.

Adjustment to Classroom Routine. The third theme rests upon two facts. The first is the fact that many slum children come from crowded homes which lack the essentials for privacy, peace, and quiet. Due to the noisy atmosphere which prevails in such homes, the reasoning goes, it is difficult for the child to adjust to the idea that there are times in the school day when he must work quietly and allow other children to work also. The second fact supporting this theme is the very short attention span of many slum children. One of the possible reasons for this is that, in many cases, the slum child has had inadequate experience with play or work tasks and, therefore, has not developed a span of attention of more than a minute or two. Learning, of course, requires attention, and children who cannot keep their attention on classroom work or who cannot adjust their activities to the classroom routine will not learn.

Dearth of Educational Experiences. The fourth theme emerges from an image of what slum life is like. It is postulated that many slum children come to school with no book experience. They do not see their parents reading books; they have no books of their own; and, consequently, they are not impressed with the importance and value of reading. In addition to the lack of books, life in the slums is thought to provide a minimum of experiences with people, things, and places. The slum child seldom goes out of his neighborhood and, as a result, has not been exposed to things which arouse curiosity and imagination. Because of the lack of toys and play things, many of these children do not develop manipulative skills and are unable to handle scissors or crayons when they first enter school. Thus, a great deal of time which should be spent acquiring basic educational skills is devoted instead to preparing the children for the acquisition of such skills. The child starts out behind the more privileged child and never succeeds in catching up.

Poor Academic Motivation. The final theme taps the cognitive world of the slum child. Because unemployment, economic difficulties, and the consequences of segregation and discrimination are so prevalent throughout the community, it is felt that the child develops an attitude that all his efforts will be useless. He may well see himself up against a brick wall and feel that since he cannot get ahead he should not bother trying. A parent who has not been able to succeed may pass on his feelings of hopelessness to his children, with a resulting low level of motivation on the part of the children.

In these five themes, most of the negative influences stem from poor home conditions. However, even when the family atmosphere is conducive to learning, the influences of the street and surrounding neighborhood nullify the good influences. The child is surrounded by an environment in which criminality, violence, and despair are commonplace. No amount or style of education, it is argued, will be successful if the influences of the home, street, and community run counter to those of the school. The school can only fulfill its own role in the total structure of society; it cannot dominate everything else in the child's life.

other. My point of reference is the Negro family and community, but my remarks apply, I think, to all groups--privileged as well as underprivileged.

Family Research

It is generally held that an unstable home environment retards scholastic progress; however, what is meant by an unstable family is far from clear. Usually, the operational definition of the term is a home with an absent father; but high geographical mobility, lack of family routines, and poor economic circumstances have also been used. These indicators are sociological, yet the concept seems most often invoked to account for, or posit, psychological deficiencies in children. Given the operational definitions of unstable families, one might well raise questions as to whether the rich who banish their children to boarding schools have an unstable family life, whether the children of sailors and salesmen grow up in unstable families because their fathers are absent from home for long periods of time, or even whether the suburban father who leaves for work early and returns late bringing with him a bulging briefcase has created an unstable family. Chances are good that the concept is so global that it has little research or corrective utility. It is time we stopped producing the endless correlations between some measure of family stability and some index of individual or social pathology. We need to find out whether such correlations are true--in the sense of not being spurious--and whether instability is cause or consequence of the pathology under review.

One way of slicing into this problem is to direct research into the ways in which families allocate their resources. There is some evidence, for instance, which indicates that a secure economic base is a prerequisite for long-range planning by families. Given such a base, do families plan for their children's education, or do they move into a better home? Do they look forward to occupational advancement, or do they envision a more stylish leisure life? Long-range choices such as these ought to affect the way a family goes about its day-to-day activities, and some of these may spill over to affect children's performances in school.

Families without a secure economic base must also allocate their resources. Is the limited amount of money on hand spent for food, clothing, books, a home, or added to savings? What are the criteria and standards used to make these choices? Time also must be allocated. Should a mother attend community meetings, help the children with their homework, or clean the house? Everything cannot be done at once, and families decide what to let slip for the time being in order to attend to something else. The way in which resources are allocated will tell us something about family life styles, and life styles may well permeate a child's attitude toward school and education.

Finally, we need to know much more about processes within the family. Nearly all surveys show very high aspirations among Negro families. Yet, these high aspirations are accompanied by poor school performance and a large number of dropouts. To my mind, this is the primary problem which needs research investigation. Are there, for example, other values which intervene to inhibit those activities which will lead to the realization of aspirations? If so, what are they, and how are they activated? Or, do school and community influences choke off the attainment of goals? If so, how do these influences emerge, and how are they able to override aspirations?

In short, family life is a process, and we need to describe that process for all kinds of class and subcultural groups.

Community Context

It is customary to take the intact nuclear family as the ideal model of family life. All other family structures are classified as deviant and, hence, harmful to normal child development. There is no evidence, however, which clearly shows that what we take to be ideal does indeed produce better adjusted and more capable children. The small nuclear family may be functional for life in the ideal town, but is it so functional for life in the teeming inner city? We need to know much more about the ways in which community context constrains socialization processes within families and about the kinds of families which perform best in different types of communities. It may well turn out that the things which are decried in low-income families, such as a matriarchal structure and little postponement of gratification, are essential for the context within which these families operate.

The schools argue quite rightly that they alone cannot do the total job of molding the young. Neither can the family. There is an abundance of evidence, for example, that shows that peer influences heavily outweigh those of the family once a child enters adolescence. What kinds of values and motivations are susceptible to reshaping by a peer culture, and which ones are more resistant? Is family life different in homogeneous, as compared to heterogeneous, communities? If so, in what way, and what kinds of families are affected? Which community resources (health, recreation, transportation, etc.) facilitate and which impede a family's ability to socialize their young?

There is an almost endless array of questions which can be asked about the impact of the community upon family life. Implicit in such questions is the assumption that the family draws upon resources external to itself. Whether these resources are abundant or scarce affects family life and, in turn, the kind of pupils with which the schools must deal.

Articulation with the School

While descriptions and analyses of family structure and processes are useful and important, they need to be tied to educational processes. It has been suggested that community influences constrain or enhance family life. School is a part of the community, and it is clear that what goes on in school affects the quality of family life. The ways in which this happens need to be spelled out.

One could ask, for example, whether education as it presently exists reinforces negative stereotypes of lower-class and minority group life, or whether the high aspirations of Negro children, noted in so many studies, are viewed as unrealistic daydreams by teachers rather than as tools available for stimulating educational achievement. In fact, much more needs to be known about the ways in which teachers handle the motivations and aspirations of their pupils.

A large research project needs to get underway to investigate teacher attitudes toward the family. We need to know what kinds of attitudes teachers have toward various kinds of families, the sources of these attitudes and their reinforcements, and the consequences these attitudes have for scholastic achievement.

Finally, much more research is needed on teaching techniques. What techniques are effective with what kinds of class and cultural groups? It is assumed that present techniques are quite adequate for middle-class pupils, but is this true? Research on teaching techniques has direct relevance for teacher training, and contributions can be made in this area as well. It has been observed, for example, that some indigenous types relate exceptionally well to slum children. Can we identify the secret of their success? And then can we train it into others? Or, to take another example, it has been shown that lower-class persons regard education as a means to occupational success. Can more effective teaching be obtained by giving teachers more knowledge of the world of work as a context for their subject matter?

Even so brief a review as this has shown that there is a lot of work yet to be done. Though there are many ideas about the ways in which family and community life intertwine with that of the schools, research documentation for all but a few is weak. We need to examine, up close, the step-by-step process from poor environment to poor school performance.

RESEARCH STRATEGY

Since research into family and community influences upon school performance can be used as a "cop out" by school systems, I will conclude with a few remarks about research strategy in this area.

The objective of educational research is to develop more effective or more efficient ways to teach children. The dependent variables in any study should, therefore, be those which measure pupil accomplishment or which clearly relate to such variables. Studies of classroom composition, for example, are insufficient if they are focused upon the interpersonal adjustments of pupils or class management issues and do not push on into the relevance of these variables for learning. Few educational researchers would disagree with this requirement. But, often forgotten is the necessity to relate the dependent variable to independent variables which can be controlled by the schools. It is more useful, for example, to relate verbal achievement to teacher training than to family structure--even if the correlation with the latter is higher than with the former. Presumably, the schools can do something about teacher training but very little about family structure. When academic achievement is tied to variables over which the schools have no control, research is essentially showing the limits of school processes upon scholastic performance. All too frequently, results of this type are used to justify lack of school efforts to improve pupil performance. Although it is useful to know the limits which family and community impose upon academic performance, these limits cannot be taken as nullifying the ability of the schools to do better.

Future research should contain much more of the kind of analysis found in the Coleman Report--namely, a concern with how much of the variation in scholastic achievement can be accounted for by various factors. But, the variables which are important for school improvement are not only those which account for a large amount of variation, but also those which can be manipulated by school systems.

MR. STUART SILVERMAN: I wonder whether the problem is just a matter of research or whether it goes a little further. Once a program is designed or put into effect, it often seems that the people who administer it are so far removed from the people the program is supposed to benefit that a great deal of what is meant to be accomplished is lost. For instance, an individual on the board of education or a person in an agency who is beginning to develop a program is actually so far removed from the children for whom the program is designed that much of the benefit of it is lost.

DR. JONES: I don't think the problem is as simple as all that. People who design programs, by and large, of necessity have to be divorced from the classroom situation. If you are in the classroom, your time and energy is very much involved in taking care of a classroom on an operational day-to-day basis. The design of programs, on the other hand, requires a great deal of time to sit back and contemplate, meditate, think up things, and so forth.

I think what you are pointing toward is that very frequently programs are designed without much attempt to search out or to contact persons who are in day-to-day interaction with youngsters. I think that kind of gap or deficiency is becoming more and more recognized, and some efforts are under way to try to close it in terms of trying to increase the participation, for example, of the classroom teacher in the actual design of remedial or preventive programs.

MRS. GENEVIEVE PAINTER: I am glad to hear you relate these things to education as a whole. In recent years, I have been working with middle-class groups and with economically deprived groups and families and have found very often that we have similar problems, although most people in conferences such as this seem to separate them. For example, in working with middle-class mothers, I am often appalled at the fact that there is such lack of order in the home that the children run the family. Bedtime, for instance, isn't a set time; a child can go to bed at any time, and if he wants to watch television he can. . .

We often attribute this to the low income family, but I have not found this to be necessarily true. In the community in which I live, we have many professional families in which the adolescents are acting up, are in trouble with the law and school, and so on. I do not see this as a separate problem. I think it is a problem of education, of professional services in general.

DR. JONES: Your community reminds me of the legend about the children of ministers and psychiatrists who are typically defined as being the worst children in the community. . . I think what you say is quite true. Some of the misconceptions, too, may well be laid at the doorstep of research. Typically, our assertions about the differences between middle- and lower-class youngsters are based upon something equivalent to percentage differences from which we get a finding that 95 percent of middle-class and only 80 percent of lower-class youngsters will answer positively, for example, to the question: "Do you want to go on to college?" We say, then, that the 15 percent difference is statistically significant, that the lower class is different, or we reverse our thinking where the percentages are low.

Certainly, in addition to the straight statistical test we need to introduce criteria in order to make assertions about the motivation, values, and attitudes of different kinds of class groups. Otherwise, we will get into this kind of misperception trouble.

DR. WALTER BORG: Dr. Jones, could you estimate from your reading of the Coleman Report how much of the variance related to achievement is in variables that can be manipulated by the school?

DR. JONES: I am still struggling through this thing. As those of you who have looked at it know, it is an extraordinary complex kind of report. One needs to go through it several times, frequently relating what is written on page 330 to what is talked about on page 29. It is a long process trying to tease out the various kinds of things that you or anybody would be interested in.

To answer your question, at the present date I can't really say what that variance is.

DR. EDMUND W. GORDON: I would like to make a comment on the Coleman Report, since it has come up a couple of times and since I suspect it is going to emerge as the bible for research in this area. There are two or three things that need to be remembered about it. I think that as a document which concerns itself with the status of achievement by different groups in public schools in the United States it is a monumental work and that there is little basis for substantial criticism of it. Much of the data, moreover, that gives us trouble is included in Chapter 3, if I recall, and this is the chapter in which Coleman begins to try to explain what he found in terms of causal relationships.

It must be remembered that this chapter was the subject of considerable debate even before it got into the report. The advisory group to Coleman suggested that this chapter not be included in the report because there were serious sampling problems as well as questions concerning the way in which data were analyzed. In addition, Coleman and the committee were unable to resolve these issues within the time available due to the deadline Congress had placed on the Office of Education in getting the report out. These problems, led, I think, 23 of us who were on the advisory committee to ask that the introduction indicate that we were members of the advisory committee, but that the advisory committee had not necessarily endorsed the report.

One of the problems that concerned us then was related to the fact that Coleman had to use school averages in comparing these children--that he was not using individual scores. The report is based upon an analysis of data on

1,000 children. These data are not the scores of each of these 1,000 children but are the averages for the schools in which these 1,000 children were in attendance.

Secondly, there are problems concerning the relationship between the several variables studied and the questions being asked. The research questions being asked made it necessary to account for the proportion of variance in achievement which would be attributed to each. This is a very important task. However, in my view, Coleman did not look at the right kinds of variables; hence, the variance that he accounts for may be relatively meaningless.

If we go back and look at the Coleman Report rather seriously, we will find that practically everything that could not be measured in a survey of school characteristics, i. e., education of teachers, number of books, salaries, per pupil cost, etc., got lumped into a category that later turned up as pupil and pupil background variables. Thus, many things other than the variables he did look at were implicitly included in the pupil variable column. This means that pupil variables in this study are contaminated by many factors that are not intrinsic or peculiar to pupils but are actually intrinsic or peculiar to the school situation. The seriousness of this problem is reflected in an extreme example. Coleman did not look at aspects of the teaching-learning process, probably an imminently important school variable.

To find that the differences in school facilities or school variables account for relatively little of the variance is true in terms of the factors that were studied. If, however, Coleman had looked at the manner in which instruction proceeds, at pupil-teacher and pupil-pupil interaction and at process variables, he might have found that school variables account for a much larger portion of the variance. If the basic research question has to do with the determination of factors which account for variations in academic achievement, the relative weight of status and index factors may help us little when they are studied in isolation from crucially important process variables.

I didn't rise, however, to make that point. I rose to make the point that I think Coleman deserves a lot of credit for having done an almost impossible task in much too brief a period of time. Nevertheless, those of us who would proceed to do research now based upon this landmark work really have to look at it rather seriously and understand it in terms of its weaknesses and its contributions before rushing ahead to replicate or to base further research on it. It is a useful document, but it also has many, many problems in it. Another point I wanted Dr. Jones to comment upon has to do with a reference he made to the extended family in a paper presented at the Urban League Conference. Do you want to go into that?

DR. JONES: It relates to my comments in this paper about the nuclear family. There is a fair amount of evidence to indicate that among low income families the typical family form is that of an extended family--that is, it is a family form in which cousins, uncles and aunts, grandparents, etc., are brought into a kind of direct interaction relationship with the children. Very frequently, an older brother or uncle will fulfill a slot left vacant by an absent father.

The extended family, as some of you might know, is probably more typical of families across the country than the nuclear family. It functions very much as a resource upon which the nuclear subpart of it can draw. In many ways, the extended family itself is a kind of self-help organization; and in terms of more specifically understanding family influences among Negro families and/or low-income families, more attention needs to be directed toward extended kin relations. We need to find out, for example, whether youngsters have much contact with uncles, cousins, and so on, and, if so, what the nature of these contacts is and what kinds of interactions, roles, and functions extended kin perform. We may make the surprising discovery that life in the lower-class family is really much more full and much more supportive of youngsters than life in the middle-class family because of the larger number of kin relationships which children have to draw upon.

DR. MELVIN GRUWELL: I think if we go into Indian culture in certain sections of the United States, we will find evidence for Dr. Jones' last statement where, in essence, the grandmother, if she is still living, takes over the responsibility of seeing that the children are provided an education. It is because the grandmother has lost her main function in the social group that she is relegated this responsibility.

I attended a graduation exercise on the Belcord Indian Reservation not too long ago where the father and mother did not attend to see their own children graduate. The grandmother, however, was there to make sure that everything was in order.

DR. JONES: That same kind of pattern also crops up frequently in the Negro family where, essentially, the grandmother takes over what we commonly think of as the mother's role, while the mother is out in the economic world either carrying out the functions that we normally think of a father as doing or helping the father perform them.

DR. CAROLYN STERN: Doesn't this seem contradictory to some of the evidence that language deficiency and the inadequate development of language in these homes is due to the fact that there is so little interaction of the parents or of the adults with the children in terms of corrective feedback, etc. ?

DR. JONES: Yes, I would think so. My own perception of the matter is that there is not as much language deficiency within minority groups or low-income groups as we customarily tend to think there is. The school situation is strange and new. Language patterns, say, between the middle class and the lower class vary slightly; consequently, the kind of language employed by youngsters coming from low-income neighborhoods may cause some kind of initial problem on the part of parents. In terms, however, of the straight notion of having language difficulties, not knowing the words, etc., I think there is not as much of a problem as we are led to believe. Moreover, I will make a prediction that there will be less and less of a problem as time goes by primarily due to the influence of television, which spouts forth not only words in the spoken form but also words in the written form which youngsters can and do pick up.

DR. JORDAN A. TANNEBAUM: You mentioned that the family life of the slum child may not be as good as it is made out to be, at least in relation to other families. In fact, it is adaptive in many ways to life around them.

You said that the school can do many things to help the child in the school setting, but you haven't spoken about the possibilities or mechanisms where either the school social worker or other community resources can strengthen family life in those families which are badly deteriorated.

DR. JONES: I thought I dealt with what I took to be the general problem first before getting into that.

I think the first rule in this general area is that, given the limited kinds of resources that the school has in terms of social work services or guidance facilities, these kinds of services are going to have to be restricted to a very small number of youngsters if they are going to have any impact at all. Given that as a kind of starting assumption, I think what is called for is a kind of school role which takes the social worker or the guidance counselor out of the office more and into the community environment in which the youngster lives.

I was very much struck by something in a psychiatrist's report once. He got involved in a juvenile delinquency project in which he was to conduct the customary kind of psychiatric interview with delinquent youngsters. Only in this project, instead of calling the individual into his office, he had to go into the home to do his interviewing. The person he was interviewing was a married 17-year-old. His wife was about 14 years old.

The psychiatrist went off to conduct the interview, did whatever psychiatrists normally do in terms of conducting interviews, and came back with a report that he had been in this person's home for about an hour and a half. The wife had been present and moving in and out of the room attending to her duties in the home, but the psychiatrist was not introduced to her at all. The youngster knew that the psychiatrist realized that this was his wife, and a formal introduction was never made. The psychiatrist reported this and it gave him a kind of insight into the relationship between the two that he could never have gotten out of an interview in his office.

I think much of the same thing holds true with respect to the kind of work that social workers or guidance counselors are to be engaged in. They need to get out into the communities, into the families, and make some observations. They can learn a great deal using their eyes, as well as their ears, as data collectors.

DR. HAROLD MENDELSOHN: It seems to me that we have a paradox here: Namely, that you have a rather revolutionary point of view of family structure and a rather mundane point of view of the role of the school. Why not take the child out of the family completely and chuck him into the school? We look at the schools as an entirely new form of environment. Since the family doesn't seem to matter too much, why can't we start thinking about creating this kind of environment rather than trying to make the old institutions adjust?

DR. JONES: We could. I suppose, though, thinking of it realistically, we couldn't do it in one big jump.

There is, actually, sort of a movement in that direction. For example, the many neighborhood day schools in New York City will eventually have youngsters between the hours of nine and five, in some instances, a couple of hours later. The life of that youngster will be very much controlled by the school situation and by what goes on within the school situation.

Whether we could really take youngsters out of the family automatically, I don't know. Before we decide to push whole hog in that direction, a good deal more thinking needs to be done about just what the schools would do if they had a hoard of youngsters from nine o'clock in the morning until nine o'clock at night instead of just between the hours of nine and three. I am not so sure that the school would want to, or would be in a position to, spend all of its time educating these youngsters. What else would it do in terms of the kind of contribution they ought to make to the growth of youngsters?

There are precedents that can be looked at, of course, and maybe some thinking needs to be done in that direction in terms of its feasibility and desirability.

DR. GORDON: On that point, we might bear in mind that the Soviet Union and, I suspect, Israel, are backing away a little from institutional care for children. I don't rise with an answer, but just to call that to your attention.

The problem is even further complicated by the fact that if one looks at what is happening to the family in western cultures, particularly with rising divorce rates and with diminution of the economic base for family life, it is conceivable that the society will have to begin to think about a time when the family doesn't play the kind of role that it has played; and pilot attempts at institutionalization of children may have to be experimented with considerably more. But this is certainly a wide open issue.

BIO-SOCIAL FACTORS IN THE DEVELOPMENT OF DISADVANTAGED CHILDREN

Dr. Joseph Wortis
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The whole question of the relationship between biological, health, or medical factors and child development is, in some respects, a pseudo problem. I think we all recognize that the hazards of health are increased when one is poor and that the development of children who are poor and also exposed to the hazards of health is hampered by these interrelated factors. Obviously, it is better to be rich and healthy than to be poor and sick. . . And, obviously, therefore, if we want to attack the problem of health and of poverty, we should not only improve health conditions and services but also alleviate poverty.

The proportions, dimensions, and the very nature of the problem, nevertheless, can be defined in such a way that we can find means to ameliorate some of its untoward conditions without providing a whole solution to it. This needs analysis, as well as some discussion. The basic consideration which I will return to again and again in the course of my remarks is: Granted that the poor are more exposed to the hazards of health and that poverty, the conditions of poverty, and poorer health hamper development in all kinds of ways, what are the relative weights we should accord to these various and interrelated factors?

In much of the scientific evidence that has been presented to us in recent years--the mounting evidence that poverty is associated with hazards of pregnancy, brain injury, prematurity, exposure to infection, and so on--there is a hidden danger which suggests the possibility that the poor are biologically defective or inferior through no fault of their own, but because they are exposed and succumb to so many hazards of health. Basing his attitude on these data, for example, the teacher who is confronted with the poor child who is doing poorly in school might reasonably conclude that the child's trouble stems from a protein deficiency or some other form of malnutrition suffered in his early formative years, that his brain is inadequately developed so that he is afflicted with the same type of deficiency that other mental defectives have, and that the best educational tactic would be to treat him as an essentially handicapped child.

The evidence for this possibility is very impressive. However, in the cases we work with, we still must form some judgment about its probability rather than about its possibility. In other words, we have to weigh our judgment in some discriminating fashion so that we can organize educational help for disadvantaged children in ways which are based, if not upon conclusive data, at least upon plausible hypotheses. This is where our literature all too often lets us down.

There are so many compilations that show beyond a shadow of a doubt that the poor are more likely to have premature children than the middle class, that prematurity is associated with cerebral defect, and that the differences are statistically significant to the level of probability that we cannot argue about it any more. But all this still does tell us how important it is in particular cases and how important it is for the population of the poor as a whole. Therefore, although we can say that it is proper and important to consider health factors in the general development of disadvantaged children, consideration of these factors poses certain crucial problems and corrective strategies in the deployment of our forces. I repeat, it is not enough to say that health affects development and that the poor are the hardest hit; we have to form some judgment about the relative importance of these two sets, or perhaps I should say three sets, of factors because one of them, the health factor, can be subdivided, as I will explain.

First, there are factors involving true biological deficit which may implicate such things as brain defect, genetic taint, or incurable permanent handicapping conditions complicated, of course, by the second set of factors--namely, the social-psychological consequences of deprivation which implicate all of the environmental, educational, social, and psychological developmental factors among the disadvantaged. A third set of factors related to the first involve what we can call the condition of the organism, which I would like to separate from the concept of permanent disabling defects because a condition of the organism connotes something reversible. Conditions such as chronic fatigue, the debilitating effects of poor hygienic conditions, the debilitating effects of constant exposure to stress, and the sometimes reversible effects of malnutrition or suboptimal diets are all implicated in these problems.

Both the reversible things that I call the condition of the organism and the biological defects which are more or less permanent are medical factors affecting development, and they are woven in all kinds of intricate ways into the problems of social-psychological deprivation. The teacher, therefore, who approaches the individual child or, for that matter, the regional Headstart administrator or research worker will have, as a matter of sheer necessity, to form some judgment on the relative importance of these factors without waiting for final answers.

At a small research conference held in Syracuse, New York in April 1967, my friend Dr. Herbert Birch presented a paper reviewing the literature on health factors affecting child development in the course of which he said, and I quote:

> . . . Of the totality of factors contributing to educational failure, the health of the child is a variable of primary importance.

Well, we can concede that the child's health has an important effect upon his educational development, but what shall we understand by the phrase, "primary importance"? Does it mean, for example, that the fact that Negro school children in Miami have a mean I. Q. of 85 has some primary relationship to biological factors? Does it mean that medical and biological hazards, such as medical neglect in pregnancy or birth injury, which our low income population may be exposed to and related factors are of primary importance in the total problem?

As I said, we do not know the exact answer, but I think there are some suggestive leads. Most physicians who operate in a clinical field do not always have the opportunity to wait for final answers from research associates. A patient is sick and needs treatment, and the physician is forced to operate on the basis of plausibility and reasonable hypothese without waiting for conclusive proof. This is exactly what we have to do in this area.

Let me review a few of the scattered facts pertinent to this theme.

In general, health care in the United States is quite poor. The explanation for the country's failure in the field of medicine lies, I think, in the free enterprise system, because the assumption that good medical care is provided to the public by elevating the general standard of living, increasing income, and having individuals seek out their own services has not been working. Part of this is due to the nature of medical practice nowadays--the complexity of organization, the need for large organizational forms, and the need for recourse to hospitals and laboratories puts the private practicing physician more and more at a disadvantage. Moreover, in an economy of abundance, medical personnel are getting increasingly scarce so that the physician is getting to be more and more expensive. As a result, there is a good deal of chaos in the whole area of medical services, with consequent disadvantage to the public at large and to the poor especially.

Statistics bear out this point. The United States, the richest country in the world, is eighth in the world in perinatal mortality, seventh in frequency of congenital malformations, ninth in rate of infant mortality. The infant mortality rate is a little better, for example, than that of Singapore. Additionally, of all 13 countries listed in the most recent vital statistics report of the World Health Organization, the United States had the worst record for infant deaths due to birth injuries. But even these figures do not tell the whole story, because the level of services to the middle class obscures the picture of the extremely inadequate services to the poor.

For New York City, we have some recent statistics. The prematurity rate--that is, birth rates under 2,500 grams--in one white middle-class district is 6.2 percent. In another district, inhabited by a poor Negro population, the rate is 16.5 percent. In the country as a whole, the prematurity rate of the Negro population is approximately double that of the white population.

From time to time, I will do what is customary and speak of the Negro population as being synonymous with the poor population. I know that this is not exactly so--I know that we have middle-class Negroes and that we have poor whites. Negroes, however, constitute a big population group, and the general characterization of this large population as disadvantaged is essentially correct. Statistics are often readily available for the Negro population, and it is a convenience to use them as equivalent to statistics for the poor population.

Parenthetically, I should point out here that middle-class patients do not always do much better in terms of health services because of the chaotic prevailing conditions. Recent examinations of laboratory services in some of the proprietary hospitals, that is, private hospitals, in New York City have revealed that 45 percent of the laboratories could not correctly diagnose a bacteriological specimen, that 25 percent could not do adequate chemistries, and that errors in blood typing in these laboratories ran as high as five to seven percent. Blood typing is especially important because the transfusion of a patient with the wrong blood can have very, very serious consequences.

Thus, when we consider the enormously rich productive capacities, the high technological development, the high per capita income, and the high level of medical training and competence in the United States, all this is very striking and points up a need for vastly improved methods for the distribution of medical services, especially to the poor.

An editorial comment which appeared recently in the _American Journal of Public Health_ seems particularly relevant to this point:

> Any effort to break the vicious cycle linking poverty and ill health has to take account of various elements, but one of the most important must be a system of health services.

In view of the rather deplorable existing circumstances, what are some of the conditions that we might think of as affecting child development in the health area?

Let me highlight some statistics dealing with the phenomenon of mental retardation. I. Q. scores, as we all know, have become a convenient statistical method for measuring what is grossly called intelligence; and we will recall that in the presumably normal distribution curve below one standard deviation from the mean, that is, an I. Q. of 83, we find approximately 17. 5 percent of the population who, according to the rules for normal distribution, can be presumed to have I. Q. 's below 83. Most educational institutions, public schools, and so on are likely to use two standard deviations, or an I. Q. of about 69, below which approximately 2. 7 percent or more of the population, depending upon whether we use empirical or theoretical statistics, can be said to have I. Q. 's below two standard deviations.

If we use these criteria, it is known by nearly everybody that we will find a big preponderance of lower I. Q. scores among the poor. In fact, the discrepancy is even more striking when we deal with the Negro population, because the Stanford-Binet was standardized on a white population. As a result, when we apply this standardized test to a Negro population, we get even higher percentages than statistical expectancy would lead us to expect.

Several years ago, Gerhardt Sanger did some extensive population studies of this problem in New York. He found that the two areas in New York City with the lowest medium income (under $2, 500 a year), although inhabited by only seven percent of the population, contributed 33 percent of the high grade retarded who remained in the community.

It is common knowledge that the so-called trainable classes of the retarded in New York City are made up by about two-thirds Negroes and Puerto Ricans and that there is an underrepresentation of these groups in the classes for the so-called intellectually gifted. It is an old story that I. Q. 's very closely parallel income levels and social class, with professional classes having children who would test on the average well above the mean of 100 and with unskilled workers, the unemployed, and welfare families far below the statistically expected level of I. Q. 's with a very high proportion or disproportion of so-called retarded children.

The situation is actually much worse than I depicted it because, aside from this spread of diagnosis based on I. Q. scores, there is an even greater discrepancy in the number of poor children who are remanded to institutions for the retarded. For children of equal tested intelligence, I can tell you that one out of every 21 known low grade retarded Jewish children and that one out of every 11 white low grade retarded Protestant or Catholic children is committed to a state institution in New York. In contrast, one out of every five low grade retarded Negro children is remanded to an institution. Therefore, not only is the likelihood of being diagnosed as retarded far greater if one comes from a minority group, but there is an even greater likelihood of being remanded to some institution.

What, then, are some of the medical considerations that may have some bearing upon this phenomenon?

I mentioned the prematurity rate. One could also speak of the increased incidence of prenatal and perinatal complications among the poor. For example, a recent statistic reported by Knobloch and her associates in the American Journal of Public Health indicates that Negroes are about five times more likely to have prenatal and perinatal complications attending their birth and that actually about 50 percent of all Negro births are affected by these prenatal and perinatal complications. It is easy, therefore, to demonstrate that the hazards of pregnancy, of birth, and of infancy are greater among the Negro population than among the white. It is also easy to prove that all of these hazards of health are significantly correlated with retardation, epilepsy, behavior disorders, and so on. I have many statistics, but I won't bother you with them. The evidence is unequivocal.

I will repeat, however, that significant correlations tell us little about the relative importance of these factors. Low birth weight, for example, is undoubtedly significantly correlated with low intelligence and also with poverty. But, if we ask how many cases of low intelligence can be related to prematurity, the significance of these data becomes more questionable. I think it would be a gross error to suppose that prematurity, to any major degree, explains the low tested intelligence of the poor.

Let me give you a few arithmetical illustrations. Let us return to the prematurity rate in New York City, which I told you may be nearly three times as high in a poor Negro area as in a white middle-class area. This means that if we merely contrasted these two districts 10 additional Negroes out of every 100 live births would be premature because they are Negro and because they were born in poverty. But in 1960, the last year for which I have readily available figures, the prematurity rate in Brooklyn, New York, was 10 percent of all live births while our clinic population, which tended to have several retarded children, had about 14 percent of the children born of low birth weight--a difference of about four percent. It should also be noted that two-thirds of our clinic prematures weighed over 2,000 grams at birth, which is ordinarily not so serious.

What, however, is the developmental importance of prematurity? Again, we have a lot of data on the development of premature infants. I take only one example--the follow-up study of Knobloch and Pasamanick in which developmental tests were done on a large group of premature infants at the age of 40 weeks. Approximately 40 percent of these infants tested normal, and approximately 20 percent showed some evidence of abnormality at this age. Thus, we are down to two cases out of 100 live births which, on the basis of prematurity, show some evidence of abnormality at the age of 40 weeks. We can go further and say that of those who show some evidence of abnormality by the Gesell development test some will not only grow up to reasonably normal maturity that those premature infants who grow up in favorable environments with good, stable families and educated mothers are particularly likely to turn out well.

Let us also consider that prematurity covers a wide range of birth weights and that the very mild degrees are far more common than the severe degrees. I do not remember the exact figures, but I think something like 70 percent of prematures are above 2,000 grams. With children born with weights between 2,000 and 2,500 grams, the difference in later development as compared with normal controls is not very impressive. Additionally, as Wolff points out, obstetrical complications can be significantly correlated with behavior disorders, but when the obstetrical histories of clinic care with behavior disorders are actually explored, cases with obstetrical complications constitute a very small or insignificant fraction of the total number of such disturbed children.

So here we again have striking examples of items of statistical significance which may not be very significant when we confront the overall problem. Not that I for a moment suggest that we ought not to reduce prematurity among the poor; by all means we should, but let us not be misled into thinking that a problem which has nonbiological roots has to any important degree a major biological component.

Let me move to a somewhat related theme--the complications of pregnancy and birth. I said a moment ago that in our big urban populations we find that 50 percent of Negroes are likely to have some complication of pregnancy or birth, whereas the white control group will have 10 percent. This is a difference of 40 percent, so there is a 40 percent greater likelihood that Negroes will have complications of birth.

But not all complications of birth are equally significant; indeed, some of them may prove to be innocuous. In a large scale study conducted at Berkeley in the School of Public Health, children who were exposed to complications of birth and pregnancy were followed up through infancy and childhood to, I think, the age of four. What was found was that half of this population were "psychologically suspect" at the age of four, that is, "psychologically suspect" by the standards of the authors.

What is "psychologically suspect?" These children exposed to the hazards of pregnancy or birth complication were psychologically suspect when tested at the age of four because, according to the authors, they had I. Q. 's on the Stanford-Binet below 85. But we have just noted that on a normal distribution curve approximately 17. 5 percent will have I. Q. 's below 83, and if we go up to 85 it is probably above 20. Moreover, there is evidence that the mean I. Q. of the poor Negro population is not 100 but closer to 85. This would mean that 50 percent of the poor Negro population have I. Q. 's below 85. So that here, too, we must be cautious about glib declarations that 50 percent of the Negroes have complications of birth and pregnancy and that half of those who have complications are psychologically suspect at the age of four, when the term "psychologically suspect" simply tells us that they have I. Q. 's below 85, which is probably not too far away from expectancy.

Additionally, there were many cross-correlations with income, quality and stability of the family, and education of the mother. There are, therefore, many crisscrossing considerations which I cannot go into, except to say this: If we take the children who present the most severe cases--and they are graded in this study by degrees of severity--who have benefited from the best of family circumstance in terms of income, quality of family organization, etc., and compare them with the children from the worst families, but whose mothers have had no complications at birth, there is practically no difference in terms of tested intelligence. In other words, the worst, the poorest, and the most disorganized families who suffered no complications at birth produced children who, on tested intelligence, had scores very little different from the children of good families who had the worst complications to contend with. There is thus a compensating factor at play here which involves the total environment of the child and which seems to have remedied the disadvantages of a biological deficit when it occurred.

I do not think things are quite so simple. I emphasize that what is measured here is tested intelligence, and I am quite ready to believe that there are subtle impairments of functioning that elude formal intelligence tests which we may find enter into the problem. But my main point is to say that significant susceptibilities to medical hazards do not necessarily connote that they loom large in relationship to the total problem of the slow development of the disadvantaged. As a matter of fact, even in this excellent study where they had their own control group, I must say in fairness to the data of the authors and to their experimental design that they concluded that, on the basis of all the available evidence which they spread out, there is a three to four I. Q. difference encountered between Negro and white children in these populations at the age of four which they think may well be attributable to the higher incidence of stressful perinatal factors among Negroes. However, they cannot be sure. On the basis of their own data, this is a judicious surmise and not a hard and fast proven conclusion.

Let us move to another illustration--maternal mortality. The concept of "a continuum of fetal wastage," which was originated by Lillianfeld and Hartcust but very much elaborated on in a series of papers by Pasamanick and Knobloch, depicts events in which death of the fetus or death of the mother represents a maximal insult which can be recorded statistically. Short of this maximum insult, there are decrements of insults which can affect development in the growing organism that stand in some general relationship to things such as perinatal mortality. In other words, anything that we do to alleviate the death rate among mothers and among infants in connection with delivery is likely to alleviate a whole continuum of minor damage that may be incurred by similar factors.

Returning to maternal mortality, Birch reported in his review paper that in 1930 maternal mortality was twice as high for Negroes as for whites and that in 1960 it was four times as high. You know, this sounds pretty bad, and it looks like things are getting worse. But these are relative figures. If we examine the statistics we will note that the reason why the maternal mortality rate for Negroes is now four times as high as for whites is because the mortality rate for whites has improved enormously while the rate for Negroes, although improved, simply has not. Thus, the discrepancy between the two rates has become greater.

If, however, we were to look at absolute figures, rather than at relative figures, we would note that both rates have declined in the 30 year interval. Moreover, if we were to look concretely at the actual incidence of maternal death, we would find that, in spite of the fact that the Negro maternal death rate is four times higher than the rate for whites, only one Negro mother per 1,000 dies in childbirth.

I would not want any mother to die in childbirth, and I am not saying that we ought to be satisfied. Again, I want to relate these data to our central concern, which is determining the relative importance of biological factors as compared with the other hazards of poverty in the education of the disadvantaged. And I submit the suggestion that a maternal death rate of one per 1,000 does not loom large in the overall problem of weighing biological factors in relationship to child development among the poor.

Now I would like to say a few words about the problem of nutrition. A good deal has been made of this, and particularly in the recent period, there has been a revival of interest in it.

Like most Americans, I happen to have an interest in the Indians, and not too long ago, after completing a report on the Pavlovian approaches in the Soviet Union to the diagnosis of mental retardation, I received a letter from the Bureau of Indian Affairs asking whether these physiological methods could be applied to the diagnosis of mental retardation among Indians. The huge disparity in culture, the difficulties in communication, and so on have made it very hard for people in the Bureau of Indian Affairs to diagnose mental retardation with our Stanford-Binet or Wechsler tests, and they had thought that the Russians might come to their help.

I thought of the headlines in the New York papers: "Reds Assist Redskins."

One of the problems, of course, among many of our Indian populations is that they have very serious health problems--malnutrition, chronic debilitating illness, tuberculosis, and recourse to alcoholism, which is a form of malnutrition. (Some of you may be surprised to discover that alcohol, which is an easily available food, can supplant other essential nutrients so that people who consume considerable quantities of it are not infrequently malnourished, even though they may be obese). At any rate, alcoholism is rampant in certain Indian reservations and among certain elements of our poor population, so that the whole question of the relationship of nutrition to intellectual capacity is quite pertinent. In the big areas of world starvation, unfortunately, it is still pandemic. We see stunted growth, serious protein deficiencies, and a number of diagnosable diseases related to these protein deficiencies. It is not irrelevant, therefore, to relate some of the problems of intellectual development in the poor to the possibility of nutritional factors.

Practically all the available data indicate that poverty and its accomplice, ignorance, combine to increase the incidence of malnutrition among the poor, and malnutrition is inextricably associated, in turn, with other health hazards. The poor tend to be lower in stature than the middle and upper classes, and we see an increased susceptibility among them to infections, reduced resistance, and so on.

These differences among the poor and the well-off are found all over the world, but I emphasize that they vary in their extent and importance in different countries and even in the same country at different times. We had serious problems in the South with deficiency diseases such as pellagra, which is almost nonexistent today, and with real starvation, which is almost nonexistent in the United States today. But dietary lacks and malnutrition are by no means uncommon, and some of the malnutrition occurs among people who should know better and who could do better, but are neglected or poorly informed.

The types of malnutrition and the possible relationship they may have to development must be assessed, I think, quite differently in backward, colonial, and impoverished countries such as the Latin American countries in which income may be one or two hundred dollars a year per family and in this country where people, on home relief, can be assured of reasonably adequate diets. So, I would suggest that at present malnutrition among the poor in the United States is probably less severe and less significant than in many other parts of the world and probably less important now than it was a few decades ago.

In one recent study on infant nutrition by Filer and Martinez, which was quoted by Birch in his review, it was found that the caloric intake of children was about the same for all of the social groups studied. Milk consumption was about the same, with only a slight increase in the relative fruit and meat consumption among infants from higher social class families. In fact, the authors found that the only significant difference was in the relatively lower iron intake of the lower-class families; and even here the difference was not too striking--6.7 milligrams a day in comparison with 9.1 milligrams for the upper classes.

Also, it could be noted that in the United States low-income babies are breast-fed less often than babies in middle-class families. Moreover, in a small series of low-income Negro infants studied in South Carolina it was, indeed, found that some evidences of malnutrition were encountered. The significance, however, of this somewhat isolated finding seems contradicted by the statement of the authors that infant mortality in this particular section of South Carolina, Greenville County, was especially low. So although it is of some scientific interest that some malnutrition was found, it cannot be associated with any serious hazards of health.

There are still some special groups in this country, particularly the migratory workers, who may have especially poor nutrition, but I think we cannot draw inferences from this about the general nutritional state of the poor. A consideration of the literature cited by Birch suggests that suboptimal nutritional conditions may be fairly common but that severe malnutrition is probably rare in this country; and I would say as a reasonable surmise that it would be rash to conclude that malnutrition plays a major role in the general problem of the intellectual development of the poor.

A few words now about the general physical status of children in relation to social class.

It is an old story that backward children are generally found to be in poor health and also to have more physical defects than normal or bright children. But here, too, the causal interrelationships are difficult to evaluate, and the significance of these possible relationships is obscure.

One very ambitious study done by a group of Mexicans and nutritionists in association with Birch in some of the poorer sections of Mexico and Guatemala does make a serious attempt to relate nutritional status to intellectual development. It picks on a few discreet modalities of function, such as intersensory transfer, and tries to relate them in quite an ingenious way to the nutritional status of the natives, with corrections for income, family size, and so on. But the data get so intricate, the conditions there are so special, and there are so many complicating factors that I find it very difficult to draw any pertinent conclusions for our American population from this study.

I would like to call attention to one other medical factor that is raised from time to time which relates to the problem of the development of brain function in the absence of stimulation. I think this is an extremely interesting and important problem which has medical and physiological implications we ought to look into.

There is a condition in medicine which has the forbidding medical term of *amblyopia ex anopsia*. Well, like most imposing medical names it can be translated into English. *Amblyopia* means blindness and *ex anopsia* means "from absence of vision," so that the phrase means blindness due to absence or failure of vision. It is the kind of blindness that a child with a squint will develop if he accustoms himself to using one eye, suppressing vision in the other. If this goes on for a certain number of years, the child will actually become blind in the eye which he does not use.

An analogous condition can be created in animal experiments if a patch is put over an animal's eye so that it does not use its eye for a certain period of time in its growth. When the patch is removed, it will be effectively blind in that eye; in other words, there will be a kind of atrophy from disuse.

There are other conditions in medicine where a function can be shown to be a kind of atrophy from disuse, and we can say it is a general rule in physiology that almost any function will deteriorate or will die if it is not exercised. This analogy is often used to explain the failure of function in human beings who, in their formative years, were never called upon to exercise certain functions.

A famous case is the Itard wolf child of a century ago who was found in the woods acting like an animal and whom Itard, the great pioneer, took in to prove to the world that even a wolf child raised like an animal in the woods could be taught to be a human being if properly educated. He applied himself with great diligence and made a certain amount of progress, though some of the bigwigs in his day were very skeptical. Pinel, the great psychiatrist, scorned Itard's effort and surmised that this was just an idiot who had wandered off into the woods and was no true wolf child. Actually no one ever did know what the past history of this child was, but the important thing is that this child could never be brought up to normal function.

Opinions are still divided in the literature as to whether or not he was a child whose development had been permanently arrested by the deprivations of his early years or whether he was, in fact, a defective child who had wandered into the woods.

There are other famous cases in the literature. I recently brought out in translation the volume of Peiper, which is called "Cerebral Function in Infancy and Childhood."

Peiper has a section in which he discusses the famous case of Casper Hauser. Casper Hauser lived in Germany over a century ago. He was a forlorn and neglected child who claimed he was the descendant of an aristocratic family who had been reared in loneliness, darkness, and isolation by some cruel people. His story was widely publicized and became very famous. Because of the peculiar defect Casper Hauser manifested (his peculiar incapacity to relate to other human beings and his serious educational deficiencies), Peiper speaks of a Casper Hauser syndrome that is the product of extreme deprivation.

I think we could find in the United States today occasional examples of children locked up in cellars or isolated for years who have also suffered more or less irreparable damage because they were not effectively educated in their formative years. From a medical point of view, therefore, we can seriously ponder the possibility of the permanent physiological decay or arrest of function in the cases of children who had not been adequately exposed to certain types of stimulation. Here, too, we have to be on our guard against a new type of prejudice against the poor which can say that children who, unfortunately, have not had opportunities to be properly stimulated can never make up these losses and must be treated, in effect, as if they were biologically deficient.

Actually, at a conference held under the Project on Stimulation and Development of Research Related to the Education of the Disadvantaged and/or Segregated, Cruickshank advanced the serious view that children who are educationally deprived in their formative years act like brain injured children. Without spelling out the theory in great detail, he was suggesting, in effect, that failure of cortical stimulation, let us say, in the formative years produced an effective decortication equivalent to an anatomical defect and that these children had to be treated as if they were biologically defective.

I do not know whether this is correct or, if correct, how important it is or how extensive that type of phenomenon may be. I suggest this to you as a very serious and worthy topic for research attention. The question is: To what extent can children who are socially, educationally, and psychologically deprived be rehabilitated after a period of gross neglect? What are the time factors involved? What degree of restitution of function can one expect?

Another suggested research idea that I can think of involves the problem of the condition of the organism. Let us not limit our consideration to bona fide diseases. The concept of asthenia is no longer quite as fashionable in medicine as it used to be. It means, again, fatigue or tiredness. I think the word asthenia has a great deal of pertinence to this problem of thinking processes or intelligence.

I was interested to observe when I prepared a report under a grant from the National Institute of Mental Health on mental retardation that in the Soviet Union workers have a special diagnostic category for certain retarded children they call asthenic types. These were described to me as children who tire easily, cannot pay attention long, or are not in very robust condition. They do not have a great deal of energy.

Such children are educated very often in the Soviet Union in open air schools, "forest schools," where they spend all of the day in the outdoors, even in winter, on the theory that the invigorating fresh air will be good for their general condition and will strengthen them. I have not heard this concept made much of in this country, but I think it is worth serious attention. Indeed, I think it may have a lot of pertinence to the problem of the health conditions of the poor in relationship to their education.

I think that many poor children who are not specifically diseased are, nevertheless, in poor condition. They are frail, poorly nourished, exposed to polluted air, inadequately exposed to fresh air and to sunshine. They have inadequate outdoor exercise, inadequate rest, inadequate sleep, and they are generally exposed to overstimulation, to loud noises, and to television all day. They are constantly exposed to stresses, dangers, fears, street fighting, and so on, and I think it all adds up to an effect upon the physical organization, the physiological integrity, and the healthiness of the child which is worth serious attention, even though it may not be associated with a specific disease.

If we are not yet able to give all children the optimal health conditions to which they are entitled, perhaps it is researchable to single out a group of such children and to give them all of these things--comprehensive health services, outdoor recreation, fresh air, summer camp experiences, etc.--to see how they can do in comparison with others with whom these factors are neglected. In other words, I think some study can be made of what can be called the general roborant management of children to see what effect this has on learning capacity and general development. It is possible perhaps to organize services for such children in connection with the comprehensive health care units which are now being supported by the Children's Bureau. Moreover, we may even think of introducing visiting nurse services to the homes of these children or using the British system of health visitors in order to see that every possible provision is made for their optimal health care.

I have already suggested the researchability of the problem of the reversibility of developmental trends in grossly neglected children. I think one could make use, of course, of child adoption settings to compare and to study the effect of various vicissitudes involving health on growth and development. We could compare the effect of low grade foster care under poor hygienic conditions in unstable, unhealthy situations with the development of a comparable group of children who have been brought up under very healthy circumstances in country homes, in good homes, and so on in order to see how these things affect their development.

I would like, as I said, to see more use made of outdoor classes in this country. No one has ever conclusively proven that it is good to have vacations, yet we all do; and I have not seen any convincing scientific evidence that fresh air and the outdoors are good for children, but I think it is a reasonable assumption on the basis of my own empirical experience and that of all my friends that the outdoors and fresh air are good for all children's development. I say let's not wait for final proof, but let's try some empirical experiments to test this hypothesis in practice.

I would also like to see some work done on the effect of the introduction of intensive well-planned all-round recreational activities, sports activities, hiking, and so on, under professional leadership. I would like to see its effect appraised on such things as motivation, interest, alertness, and learning capacity in a population.

I think, to reverse the experiment, we may inspect the health history of those children who are reared in the slums who do very well. Are there some special factors in their health histories that we ought to know about? Sometimes these survivors of the slums can be very instructive in teaching us some of the elements that make for survival. I would also like to see some comparisons between rural and urban low-income populations in terms of health and developmental histories.

In conclusion, intelligence, let us face it, is basically a two-factor product which, as they said of old, involves nature and nurture. How nice it would be if at this late date we had the means to disentangle these two factors within the child or within the population with which we work. I think it is quite possible to move in that direction, even if a complete solution is not yet in sight.

I think we must try to develop measures or tests of cerebral function which are relatively independent of accumulated learning. I say relatively independent because I do not think it possible to disengage any meaningful cerebral function from the effects of experience. A number of cerebral functions, however, are close enough to the physiological level to be worthy of special interest. I refer to such functions as simple conditioning, cue discrimination, inhibitory capacity, balance of excitation and inhibition, plasticity or the capacity to reverse a response when the signal is changed, and capacity for generalization and abstraction. I think we ought to give more attention to these elementary functions on the assumption that they may be better reflections of true cerebral capacity than some of the more complex functions we associate with intelligence.

In dealing with the complex problem of assessing physiological capacity as distinguished from acquired intelligence, we must learn to make sharper distinctions between fundamental physiological equipment and intellectual performance. I think it is in this area that the great research challenge lies.

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DISCUSSION

DR. ROBERT CALFEE: For someone who is not a specialist in this field, who is here as an observer, your talk has been most informative and provocative. I have only three comments.

One, I guess you would go along with an idea that I have been in favor of for some time--namely, that government legislation be passed to require all makers of alcoholic beverages to fortify these beverages with vitamin D and things such as that so that this nutrition problem will be taken care of for those of us who would like to drink.

DR. WORTIS: I doubt if it will increase the acceptability of the product. However, you might suggest it to some of our commercial alcohol distillers.

DR. CALFEE: More seriously, your comments comparing certain features of the health and welfare of deprived groups, your choice of a base weight, it seems to me, when you want to say that there is no real difference in mortality rates between Negro mothers and white mothers, very much affect how we view your conclusions. It seems to me that I can say just as well that if we look at a base rate of 100,000 in this case, there are going to be 100 Negro mothers dying for every 25 whites. That just strikes me psychologically as being a much larger absolute difference.

This is a game, and I don't know how one plays it. I don't have the relevant background to know whether or not, in fact, the base rate of one per 1,000 or 100 per 100,000 is something we should be living with in our society. I guess you would be in agreement with the notion that it should be considerably lower for all.

DR. WORTIS: I don't want anybody to die, and I think that if this were a public health meeting we would be justified in giving a lot of attention to this discrepancy. But we are, essentially, a group of educators, and I have thought it appropriate not to exaggerate the importance of this problem. I think, therefore, that the statistic of one maternal death among 1,000 is important for educators to keep in mind when evaluating the educational problems of their children and thinking about to what extent a child is a product of a health condition and to what extent he is a product of vicissitudes of his experience. I think we have to have some sense of proportion there.

DR. CALFEE: But as you pointed out, it is a matter of death being, as you term it, the final insult, and one might suspect that if the rate is this high among Negro mothers, it is in some sense representative of the stresses and strains to which Negro mothers are subjected during childbirth.

DR. WORTIS: I stated my conclusion before I spoke, and I gave my conclusion without evidence under the necessity of forming a judgment. Again, my conclusion, or hypothesis perhaps, is that in relationship to the biological factors the social psychological factors seem to me to be predominantly important in this general area.

DR. CALFEE: I am convinced by your argument as a matter of fact, and you changed my mind since I came in here. I would have thought that they were not just parallel but related lines of development.

One other thing which I wanted to be sure I understood in your line of argument has to do with the comment you made about 40 to 50 percent of Negro mothers having some sort of complication. . .

DR. WORTIS: . . . complications of pregnancy or childbirth.

DR. CALFEE: And you were arguing that only about one-half of them produce offspring which are then . . .

DR. WORTIS: . . . psychologically suspect at the age of four with an I. Q. below 85.

DR. CALFEE: You are saying that it should be around 20 percent, but, as a matter of fact, the suspected number of a joint occurrence of complications and psychologically suspect conditions later on would not lead one to suspect that. As a matter of fact, 20 percent of those who have complications ought also to have a lower I. Q. on the notion that these two are independent. What you wind up saying is that all of those who are psychologically suspect are also the result of a complication in childbirth, and that shouldn't be the case on the notion of independence.

DR. WORTIS: I think the data are quite intricate, and the only point I meant to suggest is that a mere presentation of the raw data, without the complex analysis that must be involved, can sometimes be misleading.

Let me look at this whole problem in quite a different way. I run a clinic that has dealt with retarded children, and I have run this clinic now for 16 years. We see a great many retarded children, and, by and large, the types we see in the clinic are biological types. They are children who have something wrong with their head, which in Greek is encephalopathy.

An interesting fact that is developed by Penrose in his book, The Biology of Mental Defects, which is the best book in the whole field of mental retardation that we have, is that the more severe degrees of retardation due to biological causes cannot be correlated with social class but that the mild degrees, the borderline types, and so on, have a very intimate correlation with social class.

So here, too, viewing the problem from another point of view, I think that the big problem among the disadvantaged is the problem of mild and borderline retardation or mild and borderline tested intelligence and the relationship to this huge educational problem. Biological factors, though important, are relatively less important than social-psychological factors.

DR. IRWIN KATZ: Dr. Wortis, I wonder if you could cite some reviews of the literature that you would like to call to our attention? I was thinking more of the many references in your own talk. Is there a bibliography available or is there roughly something similar to your talk that you could tell us about?

DR. WORTIS: The Abstract Journal of Child Development, published by the Association of Research in Child Development, has a regular section on health and public health where all of these articles are noted and very well reviewed. Additionally, a brief report of my observations was printed in the magazine called Children about four or five years ago.

LANGUAGE DEVELOPMENT IN YOUNG CHILDREN

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> Language is a prerequisite of human society, (but) . . . societies and persons differ in the extent to which they choose this modality, the situations in which they choose it, and their evaluation of it. They differ in the ways in which speech enters into the definition of situations, conceptions of personality types, and the socialization of the child. (Hymes, 1961).

The role of language in the socialization of the child--in his home, his community, and his school--was the central theme of two conferences on language development in disadvantaged children. In both sessions, it was commented that the universality of language blinds scholars and laymen, at times, to the specificity with which language is used in differing social contexts. The participants in the conferences sponsored by the U. S. Office of Education on language development in disadvantaged children, for example, were specialists representing a few of the disciplines in which language is studied. They were linguists, educators, psychologists, anthropologists, and sociologists. Their deliberations reflected the newfound intensity of theoretical and empirical work in the study of words and, particularly, the recent focus upon the patterned variations in language forms and functions espoused by sociolinguists.

The beauty, as well as the weakness, of these conferences was their strong theoretical flavor. Dr. Joshua Fishman expressed the general feeling "that there was a more poignant aspect to the usual theory-application dilemma" in our deliberations due to the urgent cry for help from those who work with disadvantaged children. Nevertheless, the fields of study devoted to language are still novel and immature, and the workers in these fields are strongly preoccupied by their theoretical controversies. Thus, it might be worthwhile to describe briefly the significant traditions of scholarship related to the study of language processes in children. The emphasis here will be on themes of contemporary importance, as reflected in the conference discussions.

The impact of Noam Chomsky has been considerable in linguistics and in the behavioral sciences. His emphasis upon language as a biologically determined process was discussed by David McNeill, a participant in the second language conference, in the following way:

> Children are biologically endowed with a specific capacity to acquire language, and this capacity, combined with the speech that children receive from their parents, automatically results in the acquisition of syntax. In short, the argument claims that children cannot avoid acquiring language.

In this context, the question was raised again and again: Are disadvantaged children confronted with a language deficit, or would it be more correct to state the following:

> The differences in dialect associated with differences in socioeconomic status are, cognitively speaking, marginal and slight . . . The step of examining their language may be, in this case, a step in the wrong direction, for the deficit may exist elsewhere.[1]

In discussing this statement, the almost naive question arose among the participants of the conference, "What is the study of language?" As defined by the new grammarians, it is the study of syntax. To others, both in linguistics and outside of it, language is defined as a broader process which encompasses the study of semantics and phonology, as well as syntax. The controversy, then, ranged from the definitional to the substantive.

While the relevance of the transformational point of view to the study of the language of disadvantaged children appeared questionable at times and the conferees felt a frustration "of not having gotten out of the theoretical clouds," this viewpoint has stimulated some important empirical research.

Courtney Cazden found in her dissertation, the subjects of which were young disadvantaged children, a differential effect of two intervention techniques called *expansion* and *expatiation.* When expanding, the tutor completes the child's "telegraphic" speech in this manner: To the child's *Mommy lunch,* the adult replies *Mommy is having lunch.* In the nonexpanding or expatiation treatment, the adult adds new content to the child's utterance. In response to the above phrase, she may say: *Mommy won't eat much today; she is not hungry.* Contrary to the original predictions, Cazden found that the expitiation treatment produced a greater gain in grammatical skill than the expansion treatment. She explained these findings, in part, as related to Chomsky's theory of language acquisition. She stated that children should be exposed to a full range of syntactical utterances for the acquisition of grammar and they might not need direct tutoring. In contrast, however, the acquisition of vocabulary does seem to benefit from active tuition. (Cazden, 1966)

Thus, one area of research of critical importance is an examination of the differential impact of environmental processes upon the acquisition of syntax as contrasted with the acquisition of word meaning.

The contribution of linguists is manifold in this field of research; a summary of this brevity cannot, obviously, do justice to it. A second aspect does have to be mentioned here, however, and that is the field of dialectology. Work is currently under way in specifying dialect patterns of urban Negroes in Washington, D. C., Chicago, Detroit, New York, and other cities, as well as in rural communities. The problems confronting the dialectologists are enormous. Among these are the choice of appropriate elicitation techniques. (The work of Labov and Stewart is particularly stimulating in this respect.) Three fundamental questions are raised in relation to studies of dialect among low-income groups in the United States.

1. Is a particular dialect but a "simplification" of the standard English pattern? (This is the position presented by Chomsky and his students.)

2. Should the goal of educational intervention in low-income communities be the development of bi-dialectal speakers, or should it be the eradication of their dialect in favor of an adequate mastery of standard English?

3. What are the problems encountered by speakers of nonstandard dialects when acquiring English in its written form? Are there, as some people have argued, obstacles to the use of language for the purposes of thought that are specifically related to being a speaker of nonstandard English?

Some of these questions touch on psychological, as well as linguistic, concerns. Educators, too, have been voicing opinions related to them. My own concern about the assumptions made concerning the harmful effects of being a low-income speaker of nonstandard English is illustrated by this statement of Carl Bereiter's:

> Our estimate of the language of the culturally deprived children, agrees with that of Bernstein, who maintains that this language is not merely an underdeveloped version of Standard English, but that it is basically a non-logical mode of expressive behavior which lacks the formal properties of thought. (Bereiter, 1966)

Understandably, statements such as this have produced controversy. Interdisciplinary research, a recurrent theme in the conference deliberations, is urgently needed in this aspect of research with disadvantaged populations. One project in this area has been the examination of reading and writing patterns produced by dialect speakers. Dr. Bailey of Yeshiva University has worked in Mississippi together with other linguists on these problems.

Another important tradition in the area of language scholarship is the study of the relationship of language to thought. This is an important but delightfully evasive topic; it has fascinated thinkers for centuries.

One approach to the study of the language-thought interrelationship is developmental. The process of cognitive socialization, of becoming a member of a community characterized by specific technological and cognitive features, occurs primarily through language. Language acquisition and utilization of speech is, therefore, not only a step toward the mastery of one of the most complex of human behavior repertoires but also indicates the mastery of the profoundly socialized content of experience.

The belief that language plays an important role in the development of thought has been argued most consistently by the Russian psychologists, Luria and Vygotsky. This assumption also forms the basis of recent attempts at educational intervention in preschool programs. The role of the early environment as a contributor to language development has already been mentioned; the new grammarians have denied or minimized its contribution. Psychologists, on the other hand, whose studies have focused on the referential functions of language, have found repeatedly impressive correlations between indices of social class and vocabulary development. Similarly, Basil Bernstein has argued that the "elaborated code," a form of language spoken by the "controllers" of society, is better suited for intellectual endeavor than the "restricted code" of lower-class speakers. The question is now asked whether or not the antecedent variables leading to the rapid development of language be specified. Broad demographic variables, such as birth order, social class, and the education of the mother have been reported to correlate significantly with the verbal skills of the child. Recently, the mother-child verbal interaction has been scrutinized in detail as the significant context in which early development in language occurs. The well-known studies of Roger Brown and his colleagues have given rise to some interesting hypotheses in this respect. Courtney Cazden, who is a member of the Boston research group working with Roger Brown, formulated an important distinction between active tuition, necessary to the acquisition of vocabulary, as contrasted with general verbal exposure, a condition sufficient for the development of syntax.[2]

Pursuing these questions further, it is interesting to report one set of findings from the Shipman and Hess studies in Chicago. Jackson reports, in a preliminary analysis, that mothers who "ask children verbal questions, or ask their children to tell them about the task, had children who were more successful learners on the task." Instructions to physically manipulate the task or lectures to their children proved to be less effective maternal teaching styles in this Chicago experiment.

In light of these findings, we may ask how children develop their use of language as a cognitive tool. Is a rich verbal environment, abundant in verbal stimulation, in which stories, picture books, tapes, and dramatic play are the daily fare, the right environment for the development of syntax as well as vocabulary? Cazden's findings indicate that this is clearly the case for grammar. It is my guess that most of the existing preschool programs in which measured language gains have occurred (primarily reflected in increases of PPVT scores) have been successful because of the availability of these types of language enriching experiences. In addition, many teachers provide some form of active tuition which results in vocabulary growth.

But the record has been less gratifying in the area of cognitive development. This unquestionably crucial area for new research is the examination of intervention methods which promise success in the strengthening of language-for-thought in young children. It is in this context that Jackson's findings, stressing active verbal responses on the part of the learner, gain a special significance. One psychologist, Marion Blank, has proposed with great conviction that intervention sessions aimed at the development of verbal mediation have to be limited to one experimenter and to one child. These sessions can be short, but they should be frequent.

The social context of this type of intervention is similar to the informal teaching situation which occurs between mothers and their children. The comparisons of middle-class and lower-class mothers have yielded statistically significant differences in teaching style, as measured by Hess and his collaborators. But most contemporary workers, including those in Chicago, are distressed by the oversimplification of this comparison done according to social class membership. It is possible that the children who are most successful in relying upon language as a tool for learning, memory, problem-solving, creativity, etc., are raised in families where the parents are involved in intellectual endeavors. Their valuing of intellectual endeavor more than material success results in their spending a considerable proportion of their "parenting" time on fostering intellectual skills in their children. In other middle-class families, however, achieving behaviors of independence, values related to the Puritan ethic, are paramount, and they are correspondingly reflected in the child-rearing practices.

These are not new observations; the relationship of parental value configurations and achievement behavior was explored by McLelland, et al., in Talent and Society. It is my suggestion, however, that there are exciting research possibilities to be followed in studying within-middle-class patterns of socialization behaviors as they relate to the development of children and their language for thought.

A third tradition, though of recent vintage, is that of sociolinguistics. This field, in spite of its newness, was strongly represented at the two conferences reported upon in this account.

During the first and smaller conference held in November 1966, Dr. Fishman suggested "that what was needed were descriptive sociolinguistic studies of the type encompassing the complete behavioral and linguistic repertoire of a given natural speech community."[3] Such studies, the summary continues, should make use of structural analysis, but should be concerned not only with how the child speaks but to whom, when, and for what purposes.

The magnitude of such a task is, indeed, enormous, though it might be mentioned that it is not alien to the author of the quote. Dr. Fishman is conducting just such a study in the Puerto Rican community of New York City. His approach is that of sociolinguistics; he examines the relationship between patterns of role behavior in natural communities and language variants as they reflect social roles. To quote again, "Perhaps we should start with social situations and see what effect they have on speech behavior," said John Gumperz, during the first conference, "using the anthropologist's knowledge of social structure to perfect Bernstein's approach." Other conferees, namely Bill Stewart, representing the Washington dialect study, and Labov's collaborator, Paul Cohen, made enormously interesting reports during our second conference based upon their sociolinguistic researches in Negro communities.

Stewart described his work in Bloomington, Indiana. The Negro community in this town, though small, includes many families who have lived there a minimum of three generations. These families do not live in a segregated part of town. Stewart shows two speech patterns among these people. One can be heard in everyday settings of Negro-white interaction, where the two dialects, white and black, are virtually indistinguishable. The second, an ethnically marked dialect, is elicited among the Negro speakers only in characteristic settings, such as socials and dances. This latter dialect is reinforced by the mass media, with, strangely enough, the disc jockeys of Indianapolis serving this role.

Research in natural settings emerges as holding great promise in this field of study. An unexplored, but crucial setting is that of the classroom. In an exploratory attempt, Abby Sher formerly with the Institute of Developmental Studies has been involved in taping, by means of small radio transmitters, the verbal interaction of four-year-old children. She found no deficit in verbal output among her subjects, drawn from a Harlem preschool center. Many approaches aimed at assessing the verbal teaching style of teachers are currently suggested. This area of investigation is a critical one and many important research projects are currently underway, including that of Vivian Horner on the verbal ecology of the lower-income Negro home.

In this cursory review of fields of study and their relevance to contemporary research in the area of language development, many topics, as well as disciplines, have been neglected. However, I would like to convey something about the spirit of these conferences, the tone of which was set by Ed Gordon. His commitment to the fate of children who have been rejected, segregated, and battered by this opulent society kindled in each participant a response and a commitment to the scholarly challenge and the human need of educating the disadvantaged child.

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DISCUSSION

DR. EDGAR G. EPPS: I would like you to expand on the Bereiter approach. I mean explain it more, and evaluate it.

DR. JOHN: One of the ways in which I think an intervention approach has to be examined is to take its conception from the diagnosis of the problem to the cure, and this, indeed, is what Bereiter has done. As an educator, he has let us diagnose what problems low-income disadvantaged children confront when in school and then let us tailor quite carefully the intervention methods based upon our assessment of what the lack might be.

Part of his assessment has been that nonstandard dialect as spoken by low-income children, primarily in Negro communities, is interfering in the children's ability to learn in school--to learn how to read and, more crucially, to learn anything in the area of conceptual skills, including imagination. Therefore, he has felt that it was crucial to take this diagnosis and not to approach the problem of mediation or intervention by the more indirect methods that were popular with the early child educators and with people associated with Martin Deutsch, and so on, because he has felt in his analysis of the gains of these intervention methods that they were just plain insufficient. He was committed to really closing the gap between the middle- and lower-class child, and he developed a series of intervention methods, together with Engelmann which were aimed at teaching specifically those skills which he considered crucial to be lacking in those children. Included in these skills is the application of pattern drill borrowed from the teaching of foreign language to adults as an intervention method of greater promise for teaching standard English to low-income children and for teaching utilization of this standard English for certain purposes of learning. It is the former, however, that is experienced in pattern drill and language which has been much the correspondence of his early approach. I think many of the things that have been done since then have really pulled in other very interesting techniques of stimulation, and I am just giving you in my description the correspondence that might be least happy to me.

The lesson plans are arranged in such a way that on the whole they are 20 minute lesson plans with five children at a time where the children are committed to intense learning during this period. There is no nonsense. In one discussion or one presentation at the New England Psychological Association, he described this thing as:

> Don't think of this method as a sweet shop--the children are intensely motivated; they work in groups of five; and they know in this particular period of lessons, not outside of the lessons, their only responsibility is to be totally focused on the learning.

The problem I see besides my disagreement with the fundamental diagnosis is where I do think the overt forms of language are not necessarily predictive to convert utilization of language, that speaking and standard dialect is in no way a guarantee that you will use language for the purposes of thought. As a matter of fact, it is my conviction that an overreliance upon the complete elaborated forms of language as to communication might, indeed, be independent of the reliance upon language internally, where we are at least suspecting that an abbreviated speech form also exists. We do not think, if you introspect for a moment, in complete sentences; we think in a combination of concept words, images, and in a kind of preverbal imagery.

One of the problems of trying to explain your thinking is to translate it into elaborated English. As a matter of fact, some of the people who have been most creative in their thoughts find the translation process in communicative thinking particularly difficult. There is a relationship between covert use of language and overt forms of language which is not necessarily a correlation of one; and, therefore, the assumption that the development of more adequate forms of overt language is going to solve the problem of relying upon language as a fundamental proof of purposes of thought and problem-solving seems to me not to be necessarily the most productive approach. It creates a certain dependent way of running that doesn't also counter.

I think the second problem with this kind of approach is that the gap is diagnosed at the first or second or third grade level and that the intervention method is based upon this diagnosis two or three years before the intervention actually starts. It is not necessarily true that the best way to overcome a deficit is by building it upon a diagnosis of an older child and then trying to develop a method based upon it, because the four-year-old child, indeed, learns very differently from the seven-year-old. Four- and five-year-old children are most exploratory and most willing to engage in some kind of learning and searching behavior of their own. You find much less of that at the age of seven, even if the child is in a good progressive school.

It is possible that we are eliminating a whole mode of learning between the ages of four and six which does not just mean you have the noncognitive early preschool but that we might be eliminating a method of learning that is crucially significant for later independent learning by this kind of method of intervention. These are hunches, and I am sure that those of you who are much pressed to create immediate results are more likely to choose a method that has shown to bring forth measurable significant gains in certain areas rather than waiting until more far-reaching methods of intervention are developed in psychological theories in language and thought which might do the trick without the possible harmful side effects that I fear the Bereiter approach represents.

MISS VIVIAN HORNER: Let me just press this Bereiter point a little further. I think there is a certain amount of evidence that will support your position which you can take, for example, from foreign language situations. Bereiter has seized upon some of the techniques of foreign language teaching and has stated his position, let us assume, as "these kids have absolutely zero in terms of anything useful," and go on from there. If you extend the position that he is taking to include what happens in the foreign language situation, then I think it is very obvious that simply learning another language is not going to do much to your cognition.

One can be an absolute slob and speak 17 languages very well. If we take this framework and extend it all the way out to the end, we come up with something like this: "Let's teach the child 49 different languages, and this should improve his cognition." It seems to me there is a great deal of prima facie evidence around that denies this.

DR. JOHN: Being a multilingual speaker, I have to agree with you.

DR. DAVID G. RYANS: This has to do with young children. It seems to me about three or four years ago Dr. Thorndike made a study at Tower University on dialects. Do you know the results of this?

DR. EPPS: I could respond a little bit to that. The last summer issue of the Journal of Negro Education had a report on that study, and they found the usual thing--that speakers of standard English did better in school than speakers of dialects.

DR. RYANS: They were going to do some intervening, as I recall, and I wonder whatever happened as a result of this intervention.

DR. JAMES A. JONES: They are doing a second phase of the project in intervention on the study. They are now analyzing the results hoping to use intervention patterns of intervention as a postscript to the original study.

DR. JOHN: The problem with using school achievement as a measure is serious in this instance, though indirectly we hope that the development of language for the purposes of learning will make the children efficient learners throughout school.

However, as we are currently constituted in the schools, the child who is able to emit standard English phrases has greater social acceptability in just about any school in the country; therefore, we know very well that the teacher's precept of the child is a critical factor in the child's own precept of his potential success. If the teacher regards the nondialect speaker as a potential failure, this will be reflected in the child's own ability to perform well in the situation. For that reason, it is a little bit difficult to assess this kind of interrelationship. On the other hand, one might argue that it doesn't matter, that the main thing is whether or not they achieve better.

DR. ROBERT CALFEE: I think your last point is very well taken. It might be worthwhile to consider changing the child's speech to some form closer to standard English just for the social effect that it has.

DR. JOHN: I didn't say that.

DR. EPPS: It is a good point, I think. Until we can do something about teachers and their expectations, the child who speaks the way the teachers want him to speak is more likely to be successful.

DR. JOHN: I agree that the acquisition of a dialect pattern which has high currency in the school system and in the society is one of the goals of intervention techniques. My disagreement is how, when, and at what price.

Very often the price that we make children pay is to stop activity in the classroom altogether, because their concern is "sounding right," and their entire reliance upon active speech is a crucial method of learning in the classroom.

However, active speech as a method of learning occurs in great frequency in all other contexts, and if it is true, as Jackson pointed out to us, that for certain kinds of task acquisition the child has to be able to formulate questions and get feedback by his own formulation of the question in some kind of a learning setting, then we might be taking an enormous risk for the purposes of social acceptability or mobility by freezing children as nonspeakers in our classroom. We have enormous numbers of nonspeakers in ghetto schools, and this balancing of how to introduce the acquisition of a second dialect, which is my bias, without running this risk is to me the most critical experimental and applied problem confronting us.

MRS. GENEVIEVE PAINTER: Do you see this as a psychologically poor side effect of the Bereiter approach? You mentioned something about that, but I don't know specifically what you meant.

DR. JOHN: I am very uncomfortable in guessing here, and I am not uncomfortable in a way of espousing a position that has been put forth again and again by the Bank Street educators who have felt that all high structures and direct intervention are likely to wipe out the very specific character of early childhood learning and that is, indeed, ill-service to the children in preschool. I am very much in favor of certain kinds of intervention methods and of active tuition in the field of language acquisition and of the use of language for purposes of problem-solving. It does seem to me, however, that because we know so very little about the people who do this well, we are going on correlational evidence where those who come from certain homes who speak well overtly are also more likely than those who do not to be able to use language for purposes of thinking. Until we know what kinds of natural processes of learning lead to the most adequate utilization for purposes of problem-solving, it is somewhat questionable to me to just utilize a method borrowed from second language learning with adults as a way to teach language skills to young children. These are biases. I do not have direct evidence of any kind of lasting problems that the Bereiter children might have. I personally have an approach which I think in the long run will be equally effective but will take into account characteristic patterns of learning in the child from the age of four to six to a respect for his community and his parents and for the language that he brings into the classroom and his role in his own community.

We need a more careful consideration of reliance upon language for thinking, which I don't think that the Bereiter approach includes. It is an assumption. You have standard English, so you have logical thought; it is an assumption that I do not believe we have evidence for.

DR. EPPS: I am not clear about your approach.

DR. JOHN: If I had a package ready as Bereiter does, you would have it on this table.

In our work, we are following several principles. First, the learning of different patterns of speech are likely to take place in active dialogue situations; therefore, the preschool classroom should have within it at least one representative or one speaker of the child's own dialect pattern which, in my estimation, is especially crucial when the child speaks a foreign language, and at least one representative of a speaker of standard English, although not necessarily full-time. On many occasions, this means you might have to have a volunteer.

Additionally, active verbal interaction between children of different dialect patterns seems more conducive to dialect change than the correction of dialect method traditionally used by teachers. One of the things we do have evidence for, in the Bloomington study, is that when children do have daily verbal interaction with speakers of the socially accepted standard dialect of the country, they are much less likely to hold on in their daily interaction with that group and to speak dialect patterns in that community which may have been brought up from the South or might be utilized in certain social context.

In other words, if we as a social group are deeply involved and interested in changing dialect patterns, then we have to have integrated schools because the most likely opportunities for continued verbal interaction between different dialect patterns is likely to occur where children, as well as adults, become models for learning. This, for many reasons, is not likely to be a realistic policy. But, in a way, my statement would be that unless we really have integrated housing and integrated schools, our demand that people who live in a segregated community speak the language of those who segregate them is really a very unrealistic demand, unless we have hard evidence that they need to be able to speak in such a manner not only for social acceptability but for the purposes of being able to function productively in this society as wage earners who have skills that an industrialized society needs.

Until someone can show to me that we cannot teach children how to read because they are dialect speakers, I accept the goal of literacy as crucial. The goal of sociability or mobility is not a crucial goal.

My point is that the development of standard English during the preschool years is most likely to take place in integrated classrooms. The development of standard English or some limited form of it for the acquisition of reading in segregated classrooms should be an educational goal after preschool. Once you have established strong self-assurance in young children and speakers, then you attempt to introduce a second dialect pattern which they can apply to highly specific educational goals--namely, the acquisition of literacy.

If our goal is to relate the standard English to literacy, then our standard methods would be different than if our goals were the acquisition of standard English for purposes of sociability. One way in which I proceed in my thinking is to recommend preschool situations which are integrated and in which this kind of action takes place. If we cannot and if we are concerned with the learning of standard English for purposes of reading, we first accomplish the goal of having self-confident, effective speakers in their own dialect. It is only after that goal is achieved that we introduce a second pattern which then will be applied to the new and important and, for the child, motivating goal of the situation. We have to somehow let them know why they should speak differently or learn to speak differently from their parents.

Another method or approach that I advocate is that we utilize the preschool years where we don't teach or where we don't expect to teach a highly structured skill such as reading for the development of varied language functions. Preschool is ideal for developing children who can use their own verbal behavior as a method of exploring. Instead of spending a lot of time teaching them standard dialect, utilize this time breaking them down into small groups, occasionally into groups of single individuals, to develop in them the capacity to utilize language (whatever their form of language might be) for the purpose of putting a puzzle together, for the purpose of teaching another child (by verbal means on nonverbal tasks),etc. Again, there is the question of balance: What are our crucial goals? In this context, we are working on procedures for the development of verbal mediation with children both in single sessions or where two children who work very well together are worked with--where one child assumes the teacher role and the other assumes the learner role. Again, I place strong emphasis upon language as an explicit form of verbal interactions which can be used in the teaching-learning process and which helps elucidate the use of language for the purposes of thought.

MRS. PATRICIA OLMSTEAD: I think it might be worth mentioning here that at the Palmer Institute in Detroit we just completed a study using a small group testing language development in the context of language skill and that we found our training procedures to be most effective. The children had a context in which to use and develop language, and we focused on the local skill of classification or categorization and on recognizing many attributes of many objects.

Indeed, we have been most impressed by the results we found in these children. We used what we called the Guidance Discovery Teacher Strategy, which meant we fed the children virtually no information. We worked from pulling all the information from the children. We were amazed at what they actually contributed; however, unless we worked this way, they would never have pushed to contribute it.

We found that the other children learned so much more when the children themselves contributed the information. Although we worked with specific objects and with specific goals and the situation was quite structured, we found that the children not only developed flexibility but developed greatly in their verbal output and the amount of verbal output they gave in the classroom.

We started with nonspeakers in the classroom, and we were really quite amazed at the amount of improvement virtually all of the children made during our training. I think this is very relevant to what you are doing--and we are working on the problem.

DR. PAUL WOOD: I would like to ask a question. Could you make some comment on the rigidity of these early dialects and on the age ranges in which these dialects are no longer flexible? I think this is a question in your approach. It seems to me that the value of communication is certainly unquestionable and that where you have dialects developing and becoming rigid you are cutting down the communication between the elements of our society.

DR. JOHN: If we assume unquestionably that children from the age of four to seven are masterful learners of new language and if we assume that we can take a child at the age of four who is a speaker of a dialect and put him into a totally new environment where his dialect is not spoken by anyone, then, indeed, we might produce a situation where his dialect fades and he acquires and substitutes the new dialect. But this is a very unrealistic assumption, because the dialect will be and is for many very important reasons an ongoing process in his community. Therefore, the assumption that two or three hours of intervention in a classroom, at whatever age, will not produce a substitution or a second dialect but an eradication of the original one and the substitution of standard English is, I think, unrealistic. Children do not learn standard English in these kinds of situations, and, in a way, the more intensively we attempt to push them in that direction, the more creative their rebellion against it might be.

Let me just mention an example here in relationship to young deaf children. Young deaf children in certain clinics are forbidden to utilize gesturing language as a method of communication because of the requirement that they learn all information by lip reading. In the John Tracy Clinic, children carry this procedure out consistently during the hours where the adults are fully available. When the adults are busy, however, in preparing for lunch, one sees 10 minutes of intensive, emotionally charged communication going on by means of gestures which allows the children to discharge all the information that they wanted to convey to each other but, when supervised, were not allowed to.

There are forms of language, and this we certainly know from European history, which are unacceptable to the authorities but become strengthened in other ways as one form of resistance. As long as these communities do exist and have strong forces which make them viable and important contributing communities to our societies, children raised in them will have very complex emotional feelings about their speech and the speech of the dominant members of the society. I think this, too, is an important factor to take into account. We might have different judgments as to how we feel about it, but educationally and pragmatically it is a mistake to ignore it.

INTERVENTION IN THE EARLY DEVELOPMENT OF DISADVANTAGED CHILDREN: STATUS OF RESEARCH AND RESEARCH NEEDS

Dr. Bettye M. Caldwell
Syracuse University

I can think of no better introduction to my topic than the marvelous Jules Pfeiffer cartoon of the dyspeptic looking old man who glares at us and says:

> I used to think I was poor. Then they told me I wasn't poor, I was needy. Then they told me it was self-defeating to think of myself as needy; I was deprived. Then they told me deprived was a bad image. I was underprivileged. Then they told me underprivileged was overused. I was disadvantaged. I still don't have a dime. But I have a great vocabulary.

I think we could almost compress the history of early childhood education into a similar series of Pfeifferian observations. Imagine, if you will, a companion series of drawings with the following captions:

> The nursery school will revolutionize education, and the poor children so nurtured will remake the world. (McMillan and Montessori.)
>
> Now just a minute, should all this lovely play and special attention be the privilege of only the underprivileged? Let's let the well-to-do have a touch of it also. What a wonderful group experience it will be. (American pioneers of the movement.)
>
> And while we're at it, let's see if we can't utilize the experience to improve intellectual functioning. (Color that one gray-haired and stately to look like Beth Wellman.)
>
> Don't be ridiculous. The I. Q. is a constant thing, and you can't change it with anything like preschool. (Maybe a male, like Terman.)
>
> Oh well, it's wonderful to have all these subjects around anyway. Just leave them alone, and they'll come home full of expressed impulses and self-discovery and sated with free play. (Make that one double, with a happy teacher with Child Development printed on her smock and a child psychology researcher standing behind her smiling.)
>
> Then we have to have someone who looks like J. McVicker Hunt:
>
> Maybe the poor children ought to have another chance at this kind of thing; this could probably be the antidote we need to cultural deprivation.

Then, in the last picture, we could show perhaps all of us at the RESEARCH DISSEMINATION AND TRAINING CONFERENCE with a caption that says:

> We still don't have many answers, but we're having a wonderful time and a whale of an opportunity.

To be sure, we are, for I know of no area of comparable excitement at the present time.

In response to the first part of my assignment for this conference--status of research--I am going to be brief. One can say simply that research is abundant. Indeed, our cup runs over with published reports, prepublication manuscripts, progress reports to granting agencies, bibliographies generously distributed by the group here at Yeshiva University--the ERIC Information Retrieval Center on the Disadvantaged (ERIC-IRCD), and so on. The pace of research activities is frenetic, but the general quality of the output, for the most part, is pretty sloppy. All in all, the field is characterized by an atmosphere of excitement, an evangelical fervor about what we are doing, and a strong conviction that we are going to save the world.

As I just said, so much material is coming out these days that no one can hope to keep up with it. ERIC-IRCD does a better job than anyone I know of; but although they helped me with the bibliographic material for this presentation, I found that I had some reports which they did not have. We are rapidly reaching the stage where we have summaries of summaries, and that kind of thing is pretty deadly for a verbal presentation.

In a recent review, Weikart summarizes the post-1960 wave of research as being pretty much in agreement, particularly with respect to year-round programs. That is, most programs tend to produce substantial gains during the first year (8 to 14 I. Q. points), with lesser gains during the second year (3 to 5 I. Q. points). Weikart also states that the new research demonstrates that just opening the doors of a preschool is not adequate, that all the evidence is in favor of the greater gains made in structured or task-oriented groups. Many people have suggested that the goals and procedures of the traditional nursery program are inadequate to help disadvantaged youngsters move beyond some initial tentative steps toward normative patterns of development and achievement. None of the current programs is old enough for the enriched children to have moved through a series of grades in the public schools. Weikart's own Perry Preschool Project in Ypsilanti, Michigan, is about the oldest, and his follow-up data are of great importance and interest. By the spring of 1967, he had data on three waves of children, the first of which had entered a program for four-year-olds, and the latter two of which had entered a program for three-year-olds in successive years. At the time of his latest evaluation, these children were in the third, second, and first grades, respectively. He found, as was reported above, large I. Q. gains in the first year and smaller gains during successive years. As the children in the programs were all initially certified as eligible for classes for the retarded, this is obviously a seriously disadvantaged group. Their median achievement in first and second grade can be actuarially expected to be at the fifth percentile. He then divided the experimental group into high (above the twelfth percentile) and low (at or below the fifth percentile) and retrospectively examined their progress. He found that both groups had shown initial I. Q. gains but that the low achievers had dropped once in regular school while the high achievers had continued to show gains. Also of interest was the fact that the high achievers were rated as superior in behavior and motivation during the year after they showed the academic gains. Thus, the academic gains preceded these other changes, rather than the reverse pattern which is sometimes assumed to be necessary.

The only other current project that involves comparable long-term follow up is that of Gray, Klaus, Miller, and Forrester at Peabody College in Nashville, Tennesee. They have reported similar gains for the first year of participation in the enrichment program, lesser gains for the second year, and slight losses for their two control groups. Other important findings from this research will be referred to later.

Just to be appropriately egocentric, the only other current research project to which I shall refer is our own Syracuse project. This is worth mentioning not because it adequately meets some of the objections I have to research in the area but because it is the only project concerned with children under three years of age that has matured enough to be able to say anything about patterns of change.

How can we make realistic and pragmatic decisions about the allocation of available resources? In spite of the fact that early educational programs are now very generously funded, there are always programs that do not get funded and children who are not adequately served. Whenever any innovative statement about educational practices is made, there are always moans and outcries relating to the impossibility of funding such all-inclusive programs. Recently, the Syracuse papers carried an announcement of the award of our renewal grant for 1966-1967. The day after the announcement, an editorial appeared with the heading, "$2,700 per child?" The tone of the editorial that followed was that that was a pretty high price to pay for baby-sitting! I was somewhat amused by this reaction, because that same figure had been recently discussed at a national meeting concerned with the cost of comparable day care programs with the implication that we must be using scab labor to be able to run a program for such a low per capita cost. (And, of course, to many people early intervention programs are still just that and no more.)

Regardless of the slings and arrows of such unjust allegations, the pragmatic fact remains that the operation of such programs, as they are now generally constituted, is a very costly venture. And it is difficult to compare their effectiveness on a cost-accounting basis with other programs geared to older children and adults where the latency between program cost and economic feedback is much briefer. In considering such costs, especially in programs that do not serve a research function, it is worthwhile to have the professional people break up a few of their stereotypes, just as an informed citizenry needs to reshape its concept of the process of education.

And many of these stereotypes are firmly entrenched and extremely resistant to extinction. One of the first ones to come to my mind is the conviction that a preschool group should contain from 12 to 16 children, that it should run for three hours a day and at least three days (if not five days) per week. But do we actually have any data to support that traditional pattern? The recent report by Marion Blank is interesting in this regard. In a program designed to facilitate the development of abstract language, she arranged a program in which six children from a class of 12 in a nursery school in a deprived area of New York City were given individual daily tutoring sessions aimed at fostering the acquisition of tools needed for abstract language. Four of the remaining children served as regular classroom controls, and two were given a comparable amount of individual attention without the special tutoring. All children were pretested with the Binet and the Leiter and retested after three months, representing a total of only about 15 hours of tutoring for the experimental group. Results showed substantial gains (not given statistical treatment) for the experimental children on both the Binet (18 I. Q. points) and the Leiter (nine I. Q. points) with a minimal change in both the individual attention control group (one I. Q. point) and the classroom controls (two I. Q. points). It is interesting that here at least is a control (classroom) group that did not show large gains.

Similar findings have recently been reported by Sprigle, Van de Reit, and Van de Reit. Using a large number of assessment techniques encompassing motor, cognitive, and social variables, these authors examined differences in gains made by three comparable groups of five-year-old Negro children in Florida. One group received a special program of "sequential learning experiences" based upon the model that cognitive development must proceed through motor, perceptual, and cognitive stages. A second group received a traditional nursery school program, and a third group received no educational experience. The duration of the program was nine months. The experimental children received their special encounters with the sequence of learning exercises by being taken into a special classroom in groups of four or five for about a half hour to an hour per day (based upon attention span and maturity level). Results, using analysis of variance, showed significant differences among the groups on all 19 measures of the dependent variables. The experimental group was always significantly better than either the nursery school control group or the at-home control group. Reassuringly enough, the nursery school control group was superior to the at-home control group in approximately half of the comparisons. In I. Q. scores, the experimental group increased, the nursery school control group remained about the same, and the at-home control group decreased slightly. This study raises the interesting question of whether the impressive gains made by the experimental group could have been achieved only in the context of the supportive accompanying nursery school experience, or whether the same degree of acceleration could have been achieved with only the special learning sequences, thus making it possible, at least theoretically, to process approximately three times as many children in a given time period. Although the logistics of such a venture are frightening, the experiment is well worth conducting.

Another lead that mandates a reexamination of some of our stereotypes about the kind and pattern of preschool programs comes from the ever-stimulating Peabody group. In a recent report, Gray and Miller describe what they called a "vertical diffusion effect" of their enrichment program. That is, they found that younger siblings of their experimental subjects had I. Q. 's, upon their initial testing, that were some 14 points (on the average) higher than the I. Q. 's of siblings of their control subjects. If this finding holds up and can be replicated, it offers validation for a working principle that has been followed in the public health field for many years--namely, the concentration of services upon the mothers of first-born children. Can we conclude from this that in the event we cannot finance early education for *all* disadvantaged children that we make a decision in favor of *first* children? Obviously, we are not ready to make such a recommendation until we know whether the vertical diffusion effect works up as well as down the age scale or until we know whether it operates in some families but not in others, etc.

Committed as we all are to the values of parent involvement, we should eagerly await the results of some of the current research using as the independent variable some type of parental training and as the dependent variable some measure of child response (*not* merely a change in parent attitudes, child-rearing practices, etc.). This represents a type of intervention that was considered laughable only a few years ago--I well know, as we were laughed at for contemplating such a program. (Just as a historical note I will comment here that Julius Richmond and I got into the day care business as a consequence of getting cold feet about what one could expect from an individually oriented parent education program as a procedure for fostering developmental advance.) The general format for such programs is considerably more economical than that of most of the formal preschool intervention programs. That is, one home visitor (teacher, social worker, etc.) might visit from 20 to 30 families per week, with the target population being *all* the children in the family and not merely one child who might be selected for a preschool program. I know of no project testing such a program which has as yet distributed data on even preliminary results. At any rate, the home intervention model--a direct model rather than merely a take-it-or-leave-it adjunct of the child intervention model--well deserves a chance to demonstrate its effectiveness. In terms of cost, such a program should be far less expensive than the direct child intervention program; and, with its possibilities of both vertical and horizontal diffusion of effects, its payoff may ultimately be greater. (I don't believe for a minute that it is, incidentally, but it deserves a chance).

In this paper, I have tried to summarize and editorialize on selected research findings and research needs in the general area of early intervention programs for disadvantaged children. The dissemination of findings is frenetic and fluid, almost like the highly mobile happenings of the international jet set: Just as you get to a party in Cannes, you find it has moved on to Nice. At this stage, I am almost inclined to suggest that we call a halt to meetings, close down ERIC-IRCD for a year, and take a blood vow not to send one another our prepublication manuscripts and not to submit anything to the journals until we have thought about it for at least a year.

Quite seriously, now is a time for consolidation and thought, for policy planning and strategy rather than program implementation, and for analysis and synthesis of current and old data. The early results of most of our early intervention programs are all encouraging, but they do not exactly rest on lapidary data. Rather, they might be described as written in disappearing ink. In order to strengthen our data base from which to plan programs, I have suggested in this paper that we need to give careful consideration to the conduct of research which will enable us to individualize educational experiences and to identify those children who may be expected to profit from early education. Also, we need a great deal more attention to attempts to describe the intervention experience--only when this is possible will we be able to manipulate at will the most influential aspects of the intervention.

I have suggested also that we need to give our attention to new assessment procedures and to acceptable research designs which will enable us to arrive at conclusions even when we cannot achieve the traditional patterns of control. And, most certainly, we need to eradicate the disabling schism that still exists between research and teaching. Furthermore, we need to be as willing to be innovative about traditional educational patterns as we generally expect the public to be when it is called upon to approve bond issues, support pending national legislation, and the like.

I have saved for my final summary one point which, to some extent, encompasses all the others. It is a plea that we mobilize our energies to determine definitely whether the education part of the programatic label, early childhood education, can stand on its own. If we should find that it cannot (which I doubt would ever occur), we must discipline ourselves to be honest enough to say so. Here, it is easiest to illustrate my thoughts by referring to Project Head Start. In a semi-official article describing Head Start, Carleton lists five major components of the programs: 1, health services; 2, nutrition supplementation; 3, education; 4, parent involvement; and, 5, social services. In a somewhat similar article, Julius Richmond omits the nutrition component and lists education as the second component of Head Start. Miller, in raising questions relating to available strategies for the allocation of resources, criticised this displacement of the education component by the health factor as follows:

> It vacillated between being an education and a health program, between being a school service and a school change program. Initially it was a program that talked about preparing children for school. Since then, the education role has been underplayed, and the major contribution seems to be in identifying health defects. . . The movement from an educational program to a stress upon health is actually a regression of objectives.

Actually, in terms of my fairly superficial acquaintance with the early objectives of Head Start, this indictment is not true. Richmond quotes the original report submitted to the Office of Economic Opportunity and to the President in 1965 as follows:

> *It is clear that successful programs of this type must be comprehensive, involving activities generally associated with the fields of health, social services, and education.*

Regardless of the question of historical accuracy here, the fact remains that the educational component of Head Start has not been asked to stand on its own feet. If medical and dental screening (and hopefully community amelioration of uncovered defects) were actually the major goals of Head Start, then certainly it would be much less expensive to provide for these in other ways. I think that to imply that such screening would not have been possible without the summer enrichment program is an unwarranted indictment of the adequacy of medical care in this country. After all, most of the school districts have some sort of school health program, even in communities where large medical centers do not exist. All that would have been necessary would have been to activate those services two months early. Similarly, if giving children a hot meal a day is a primary objective, that too could be accomplished without the superstructure of an educational program. My point is this: While fully supporting the value of an integration and coordination of health, education, and welfare services to young disadvantaged children, we should not permit the possible value of the associated services to mask the value (or lack of the same) of the educational programs. The *only fiscal justification for offering these important services through the medium of a summer preschool program is the developmental gain assumed to be associated with the preparatory educational program itself.* Now if we cannot demonstrate such gains, or if any gains we do find seem to evanesce in a short time, we should not hide behind such defenses as: "'The medical services would not have been available otherwise,'" (they could easily have been made so); "'It brought the parents and the school closer together'" (adding personnel to the regular school year program could accomplish that); "'Some of the children had never before had a hot lunch'" (poppycock--who wants a hot lunch in August in Memphis or Morgantown); or "'The fact that the gains were not sustained proves that the elementary schools are inadequate.'"

Somehow that last defense strikes me as the most devious. Granted that the elementary schools are inadequate, that is hardly a conclusion that can be drawn from the type of data we are basing it upon. I feel very strongly that, in order to make a strong case at the policy level for early educational intervention, we must prove the value (through many replications and with careful statistical treatment) of intervention begun *prior* to the beginning of regular school programs. If the slight gains we are able to produce evanesce in the bump and grind of the existing elementary school levelling process, then in all honesty we should advocate forgetting about preschool programs and concentrate instead upon improving the later educational programs. We are playing this game for keeps.

If somebody else has to aim for us or if we demand to have the rules changed if we appear to be losing, then we ought to pick up our marbles and go home.

SPECIAL EDUCATION: MODELS AND DILEMMAS

Dr. Frank Garfunkel
Boston University

Special classes, training schools, and mental hospitals are the garbage dumps and junk yards of education in which are placed the refuse from schools, homes, communities, diseases, accidents, and genetic and constitutional anomalies. These classes and institutions have been promoted to provide a nominal relationship between children and educational programs. This non sequitur has led to the further absurdity of providing "specially" trained teachers to staff these classes.[1] It is directly analagous to constructing a building from the top down, unless it is assumed that special class and institutional placement is a custodial and isolating process that requires the lip service and garments of educational respectability. There is the full regalia of eligibility requirements for children,[2, 3] certification regulations for teachers,[4, 5] and curricular plans for children.[6] Although this labyrinth is not particularly different from the rules and regulations that surround public schools[7] or, for that matter, other professions, the mythological nature of disability brings the ludicrousness of regulations in special education into relief.

The assumption that special classes are for the purpose of isolation rather than education is, to a large extent, manifest. Special classes and institutions are for children who do not fit into any setting; and, for the most part, they do not provide any kind of choice educational and therapeutic placement.[8, 9] The assignment of children to classes involves a superficial accumulation of data which permits the school or agency to complete a forced choiced task.[10, 11] There is some attempt to sort the garbage from the trash, but the distinction is largely unrelated to educational programing, although it provides for an administrative consummation. The placement of disabled children into special educational settings or, for that matter, the placement of disadvantaged children into school settings is more closely related to sociocultural imperatives than it is to any psychological considerations.[12, 13, 14] A retarded child is one who is placed in a class for mentally retarded children,[13] just as a disadvantaged child is one who lives in a slum. The process of special education is an outcome of this social fact and, in general, is not a therapeutic process aimed at rehabilitating (or habilitating) the crippled and the maimed.

What has been said of special classes applies to the training of special class teachers. As trainees learn about mentally retarded or emotionally disturbed children, they are confronted with gaps between symptomatic descriptions and classroom procedures. Either they are instructed to dilute an educational technology that has already failed for the children they are working with, or they develop new approaches which are without guidelines or anchors. This has resulted in a system of special classes, teachers, and children that functions largely without integrity or direction, where means justify themselves, and where the end has come to be the maintenance of the system.[9, 15]

This argument applies equally well to the education of disadvantaged children for many of the same reasons.[16, 17] In both cases, the failures of education are brought into relief because marginality is intolerable.[18] For most children, the inadequacy of their education simply means that they will not read, write, or think quite as well as they might have. They may graduate from high school with slightly lower grades, and they may go to a somewhat lesser college. For disabled and disadvantaged children, marginality means failure and dependency. Impaired motivation is a fatal trap rather than an inhibitor. The failure of the child in the system is attributed to the child rather than to the system, and the latter responds by becoming more archaic and more repressive.

The expediency that characterizes the "why" and "what" of the system has occasionally led in surprising directions. Although garbage is garbage, it also has fertilizing qualities which have led to a considerable variety of growth. Affluence has led to agencies and procedures which classify and place misfits which, in turn, have impelled some critics to question why children are isolated and, perhaps even more relevant, why teachers and other professionals are working with children.[8, 9, 14, 19, 20] The dilemma presented by disabled children is as relevant for teachers as it is for children. It is a forceful proposition that the role of custodian is essentially menial and will not attract and keep intelligent and resourceful workers or serve to create attractive educational environments. This, in turn, must necessarily degrade the learning process for the child, and his rejection of it and all that it implies is not at all surprising.[21, 22]

In order for special education to be other than a custodial process, there has to be an understanding of and a belief in the potential for extraordinary change.[13, 23, 24, 25] But this is a gross contradiction to the desires and energies of people to construct harmony rather than disharmony. Ironically, there is considerable and perhaps necessary comfort in assuming (and believing) that we have come to be what we are because of the givens of past situations rather than because of personal failures. At the same time, it is comfortable to assume (and believe) that children are as they are and will remain as they are because of the effective or defective equipment which they possess. This, then, is the real paradox of special education as it forces teachers and other professionals into a grossly contradictory situation vis-à-vis children. The ideas they must believe in and the procedures they must adopt, if they are to effectively deal with upsetting the cynical expectations that are held for children, will necessarily disturb the society in which they live and, more specifically, the school in which they are working. The well-adjusted and contented teacher and system are not going to do very much about changing children because the expected behaviors of these children are part and parcel of the system which they accept.

This intellectual and emotional disposition for accepting extraordinary change as possibility and as probability is the leitmotif of the growth that has come from the miasma world of special education.[26, 27, 28] Just as it connects innovation, programing, research, and training, it is basic to the distinction between custodial education and excellence in special education.[29] It is crucial here to distinguish between the expected growth and development of normal and disabled children. Obviously, every educator and parent believes, with good reason, that children will grow up. However, not only do we assume growth but we also assume that the rate and extent of growth can be predicted.[30] Therefore, change that is above and beyond what is expected is referred to as being extraordinary. To the extent that our aptitude tests will not predict future achievement, we will have been able to intervene in the system and develop determinants other than those with which at least some people are quite unhappy.

The possibility that current functioning might be relatively independent of future functioning is not particularly palatable to educators or psychologists.[23] Theories, as well as programs, depend upon consistent behavior over children and over time. And it is conceptually more convenient if the determination of this growth is inherent in the organism rather than being the stray cat of interaction. Choices that are made by parents and schools affect the validity of predictions that are made. They reinforce a system that maintains itself, at least until forces counteract the status quo and demand change for reasons that are obvious to people who have worked with either disabled or disadvantaged children. Contributions of special education have integrity only if they are viewed in these terms. Those educators, psychologists, psychiatrists, and social workers who have become concerned with educating disabled children have drawn freely from a variety of disciplines to monitor and intervene with development.[31, 32, 33, 34] But the model that has evolved is not any one of these disciplines. Behavioral modification has its own theory and tradition.[35, 36, 37] It is not a special education model even though many educators are using it as part of, or as all of, a special education program.[38] Similarly, models drawn from other disciplines and applied in an orthodox manner are simply extensions of those systems and are, in general, not consonant with the underlying motif of special education. They have, as an essential part of their equipment, a self-fulfilling characteristic which can be theoretically constructive but which cannot dynamically incorporate effects from external sources. Hume's discussions of miracles applies here in that the miraculous effect is fundamentally denied by the system and is considered to be supernatural.[39] Similarly, there is the concept of pseudo retardation which explains away change by appealing to a spurious diagnosis.[10, 25]

The adoption of any behavioral model by special educators depends upon two action principals. The first involves a repudiation of existing assumptions of inter- and intra-individual consistencies (and hence predictability) in terms of the usual global criteria.[24, 40] The second is that of collaboration--that disability is, in general, complex and must be attended to by a variety of disciplines, but without the hegemony of any one of these disciplines.[41, 42, 43] The complexity of disability must be dealt with by complexity of treatment which leads, ipso faco, to the rejection of theories of global causes and effects. The destruction of conventional professional hierarchies where a given discipline functions as a kind of super power is crucial to the reappraisal of conventional expectations of change In some aspects of the poverty program, it is clear that the hierarchy is being attacked and, it is just as clear, that there is a deep-seated resistance to upseting conventional modes of decision making.[17, 44] The transformation of the hierarchy in personnel has been and, hopefully, will continue to be symptomatic of a transformation of the conceptual hierarchy which so deeply affects the ways in which we think of children and change.

In order to conceptualize the contributions of special education, one must first define necessary and sufficient conditions.[34, 45] The action principles enunciated above are necessary to distinguish between the models of the several disciplines and the model of special education. It must be clearly understood that special education is not experimental psychology, psychiatry, social work, or traditional education. The fact that it is a synthesis is unique--this follows from the evolving structure of special classes as alluded to in the opening paragraphs of this paper. The obvious focus is toward problems rather than theories and children rather than behaviors.[46] Theory in special education applies to educational and clinical process which leads to applications rather than to any theory of personality or behavior. Etiology may have meaning for neurology or psychoanalysis, but it has little meaning for educational placement or technology.[12, 26] In fact, etiological concern is probably deleterious to the stated purpose of special education which is to effect extraordinary changes in children. The marginal probability, although statistically significant, that a particular child belongs in a diagnostic group and should receive prescribed interventions is the province of the psychologist who is interested more in "control" than in education. . Diagnosis takes on different meaning in the educational situation because it is much more heavily weighted in the direction of accomplishment than of pathology.[47]

This is not to put special education in opposition to other approaches to diagnosing and treating children but rather to properly assign to it its unique role which is intimately connected with the realities of children in schools. There are ways to intervene with disabled and disadvantaged children other than those that have been described as special education. If this distinction is not made, then special education becomes an undifferentiated pool of teachers, therapists, machines, children, classes, and laboratories which are more closely connected to their separate traditions than to special education. I would suggest that, although most special classes are simply reflections of circumstances and personalities, there is a growing tradition of intervention that is borrowing freely from many disciplines but which is essentially independent of any one of them.[32, 48] This independence leads to rather critical departures both from the theories and the methodologies of the respective disciplines. Orthodoxy is dispensed with both because of the necessarily collaborative nature of special education and, more profoundly, because the hypothesis testing of the classroom does not necessarily lend itself to straightforward verification of theories that were developed with different purposes in mind.[49] There is a necessary pragmatism that must pervade classroom work which cannot restrict itself to the single purpose criteria of some experimental procedures or to the mystical ones of others. Whether or not educational procedures work is not simply a question of particular inputs. Teachers, children, and situations vary over time; and where effects are ascribed to a particular methodolgy, it is usually impossible to avoid wholesale confounding.[50] If effects are extraordinary enough, then confounding is of trivial import unless great claims are made for the validity of certain inputs. This distorts educational process into a glorified "black box" paradigm and results in the spread of cults, which is harmful only if religious activity parades as science.

In recent years, various names and techniques have gained worshipping disciples who spread a gospel that has a decidedly religious fervor to it. Panacea replaces placebo in the merry-go-round of seeking the godhead. What has been crippled from diffuse insults is said to be cured or ameliorated by a method, and the confounding of person and method is ignored for the sake of the greater good. The galaxy of solar systems, each with its own special sun, beclouds both the beauty and the utility of the "cool world." This curious determinism to combat determinism dehumanizes the teacher and, hence, the child. The straw "men" of individual instruction, interpersonal relationships, love, and freedom are sententiously impaled by their own platitudinous and perfidious projections. Instead of concern with the process, there is a fixation on the hallowed and inviolate products of lives and places that were but are no more.

I would contend that, although disabled individuals have been the objects of the development of many products which presume the infinite, we should not be concerned with these products but with the process by which they were developed. The models of direct teaching,[51, 52] behavioral modification,[36, 37, 38, 53] patterning,[54] sensory training,[55] psychoanalysis,[56, 57] occupational education,[58] and nondirective teaching and counseling[59] represent an apparent spectrum of strategies.[60] In reality, they are a spectrum of products. Whether these two kinds of diversities are isomorphic is moot; but, disregarding the putative connection, it would seem to be far more fruitful to attend to process variation. The fact that an important segment of special education has gone in the latter direction is attributable to the realities of placement rather than to any of the unique qualities of special educators. It might very well be that if we closely examined the process rather than the products, we would find quite a different alignment than is commonly accepted as we review the variety of applications in special education. Perhaps certain operant conditioning approaches and certain psychoanalytical approaches would group themselves together because of the ways in which they were conceived and applied. The disposition that a collaborative effort has with respect to a given child or class of children is much more essential than whether the resulting strategy is psychoanalytic, operant conditioning, or educational enrichment.

A corollary of the motif that has been torturously discussed above has to do specifically with our conceptions of intelligence. In a variety of ways, special educators have contributed to the thus far unsuccessful destruction of the G-factor conception.[40, 47, 61, 62] For the most part, our psychological and educational traditions devoutly accept a unifactor concept which manifests itself in the total educational structure, in the placement of children in schools and different kinds of communities, in the development of curricular materials, and in the traditional concept of the special class.[63] However, in research in special education over the past 20 years we can see many examples of researchers attempting to break or, perhaps, just injure the monolithic superstructure which pervades so much of what we do and what we think.[24, 28, 40] Efforts in this direction have, of course, not been confined to special educators; but, apparently, they have been chiefly applied in special educational situations because of the presumed notion that there is everything to gain and nothing to lose.[64] Curiously, the explanations of phenomena which contradict our conceptions of the stability of intelligence have focused upon the inadequacies of the tests and the subjects' ability to take tests rather than upon the concept itself.[65, 66] We constantly hear that the test scores of disadvantaged children are really higher than they appear to be, and the suggestion is made that there should be some correction so that these tests more adequately reflect the abilities of children who take them.[17, 40] It would seem to be more parsimonious to assume that the concept is at fault and that the inappropriateness of the test is not a function of a mismatch of child with test but rather of a mismatch of culture and curriculum. Surely, the test is a part of the curriculum both in the minds and the procedures of teachers and psychologists who are testing and working with the children.

The experiences of special education force us to question whether we are in the business to suddenly and miraculously transform all teachers and all children, or whether research efforts should be directed toward more intensive exploration of the process as it takes place with selected children and teachers.[45, 67] The special class teacher is forced to improvise because varieties of disturbances in diverse groups of children are not amenable to any one methodology or treatment. This is not to say that improvisation always takes place or even that it often takes place but only that the necessity for it becomes more compeling as one becomes more closely involved with educational situations that defy any simpleminded categorization. The special class is, in general, a teaching situation which is generic to all other teacher situations for the simple reasons tha it contains children with a greater variety of disabilities, ages, and dispositions. The relatively greater homogeneity of regular classes permits the developmen of less differentiated curriculum; but, clearly, there should be a close relationship between the two types of differentiation--in children and in curriculum.

The hue and cry from educational critics that schools for disadvantaged children should revamp their curriculum so that they are more compatible with lower-class life[17] comes from a gross confusion between antecedents and consequences. The failure of lower-class schools is also the failure of middle-class schools.[16, 68, 69] Inappropriate curriculum and ineffective teachers are the result of a process which probably fails just as much (or just as little) in middle-class schools as in lower-class schools. However, since the failure o lower-class schools is reputed to have more remarkable and apparent consequences (supposedly riots, school dropouts, functional illiteracy, unemploymet, mental illness, mental retardation), it is much more obvious. To focus on symptoms--subject matter, teachers, buildings, and equipment--will be disastrous. The pathology resides in the process whereby teachers and supervisor "collaborate," unfortunately, with text book and work book publishers to "create" a curriculum. This is just as true for disadvantaged children in preschools as it is for graduate students in universities. What is coming to be more and more obvious is that excellence in education will not allow for the assumption of invariance across teachers, children, situations, facilities, and social-political atmosphere that must be made for the development of A CURRICULUM. The argument that is often given--that most teachers are unable to take part in a process which forces them to make their own decisions and that supervisors are inadequate in quality and insufficient in number to monitor and constructively criticize the process--seriously begs the question.

This is not to suggest that techniques will radically change or that recent innovations will be shelved but, rather, that the process of dealing with curriculum construction class by class, in a heuristic manner, will lead to a more effective matching of teacher and method with students. Furthermore, such a process imposes compatibility between the learning of children and the learning of teachers. I have little sympathy for the proponents of production line education not because it will not, in some way, work, but because it systematically reduces the choice of the learners--both teachers and students. A belief in self-determination--which is certainly a value judgment--is germane not only to ends but also to means.

It would appear that one of the crucial issues of the poverty program is self-determination of individuals and groups. To develop educational programs that violate this would serve to perpetuate the system. The principle of self-determination has been forced upon special education for the same reasons that it will be forced upon education for the disadvantaged. The question is whether this will be recognized, or whether school people even want to recognize it.

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DISCUSSION

DR. EDMUND W. GORDON: Your closing comments suggest that you may feel it is not possible for us to have a science of pedagogy that is guided by certain principles that can be generalized. Is that the position you take?

DR. GARFUNKEL: No, what I am objecting to is a science of pedagogy which is based upon global units which I consider to be relatively meaningless.

DR. GORDON: My second concern now has to do with your reference to ecology. Would you say that the concern with it necessarily leads to a preoccupation with prediction?

DR. GARFUNKEL: Of course . . . I am not speaking from the context of special education where ecology has such forms as "a child is a mongoloid" or "a child is brain injured." The fact that a child is a mongoloid implies that this was the cause of the effect and that is about as much as you can say. Or, that the mother had rubella and the youngster is a rubella child and, therefore, deaf or retarded. . . I just don't know why all this need concern a teacher. I think that if she looks at the means and the standard deviations of the group she will have certain predispositions, and I think she can learn much more from the child.

We talk about rubella children, but there are many rubella children who are never identified as such because we don't have the need to look back and find out. Once something is wrong, we look back, and the mother reports she had rubella. It is then assumed that there is some kind of relationship here--the whole puzzle fits together, and the child fits into his niche.

MR. DAVID MASSARI: That is quite a different thing. You are objecting to the misuse of the identification of ecology--the misuse of classification. But that is not to take away from its importance.

DR. GARFUNKEL: Who is it important for?

MR. MASSARI: I think, in many cases, it would be important for the teacher to know that. Careful use of it makes it another piece of information to put in the hopper to be able to talk about your match of the environment and the individual.

DR. GARFUNKEL: Is that what we are interested in--just filling up the hopper?

MR. MASSARI: It seems to me what we are interested in is the problem of match. What are you interested in? What are the bits of information that are important for you?

DR. GARFUNKEL: If this is information about the child that is going to affect my planning work with the child, then I am interested in it. What I am objecting to is a hodgepodge of information which would not have any effect upon me in terms of what I do or what I would have someone else do.

DR. EDWIN H. SMITH: Where does a class begin and end? It seems to me that the greatest advances we have made have been in classification, noting there is a continum of everything. Everything in the world is similar, and everything is different.

DR. GARFUNKEL: It would be a pragmatic question. For years we played around with the concept of brain injury; and now when we see a child who behaves in some kind of odd way, we make an appeal to a neurologist to find out whether the child is injured and find out then that we know whether that is the reason he is behaving that way.

What I am saying is that the concept "brain injury" is worthless in education. It doesn't tell us anything. It gives us a few excuses. It is a good classification for a person who is interested in injured brains for neuropathology.

DR. SMITH: What does "apple" tell you, or what do the classifications "animal" or "dog" tell you?

DR. GARFUNKEL: I think that they are labels that mean nothing to some people, because they are completely outside of their experience. I am just saying that we have a great concern in special education, as well as in other areas, for medical labels and other labels which presumably suggest a relationship which is completely untenable.

DR. DAVID WEIKERT: Probably, both of us could agree when everything is said and done with your point. There is no point in a label, because it doesn't translate directly into any sort of classroom activity. I don't understand, however, how this fits in, or I am more interested in your general statement in teaching as an art.

DR. GARFUNKEL: I didn't say that.

DR. WEIKERT: There is a tremendous pessimism toward any kind of separation of person from program which I translate as teaching as an art. Would the point be any direction and any possibility in the program as development as separate from people, teachers, or specific persons who have made a cult to it or a certain dedication to it?

DR. GARFUNKEL: I think there might be certain generalizations about people who are more prone to lean toward certain programs. However, I would not want to tell a group of teachers the way they were going to teach for two reasons: 1, because this is not what I want the children to be getting; and 2, because I don't think telling a teacher how to teach is going to effect how she teaches.

What we have been doing lately is filming teachers who are all performing the same general task. We hope from these films to be able to compare some direct behavioral recording with more global types of assessments of the teachers, and we would like to make some attempt to really get at what I might call a science of pedagogy by aiming at a higher behavioral level.

DR. BETTYE M. CALDWELL: What is meant by a higher level?

DR. GARFUNKEL: I guess what it means is that I am not particularly interested in the observer who is counting things, because I do not think that this is comparable with the complexity of the behavior that is being analyzed. In other words, it is kind of an assumption that the quantitative differentiation between a child who is aggressive 25 times in one day as compared to another child who is aggressive four times in one day has some relationship to some higher concept of the personality of the child, and, similarly, with the teacher.

DR. CALDWELL: How would you characterize that same behavior? Maybe that would give me what you mean.

DR. GARFUNKEL: I find it difficult to escape looking at the quality of the three times and of the 25 times and not resorting to a straight quantitative approach to figure out whether one child is more aggressive than another.

DR. CALDWELL: Could you give an example of that teacher behavior--what you mean by higher order of variables?

DR. IRWIN KATZ: That is a quantitative statement. You said if you want to determine whether one child is more aggressive than another... that is a quantitative statement and that it takes quantitative means to deal with it. What you are suggesting is that some quantitative approaches are too simpleminded, which, although I think we would all agree, doesn't get away from the problem.

DR. GARFUNKEL: I agree, but what do you mean by "more"? (It is almost a little sorting task.) Do you mean "more" in the sense of more effective, more aggressive, or more times aggressive? You can easily count times, but you cannot so easily count effect and affect.

There is a kind of tendency to resort to straight quantitative counting. I would say I would end up with the quantitative, too, but I would base it upon the judgment of someone who would have to be a participant observer in the process and who would have to have the skills and the precepts to be able to make the judgment.

All I am saying is this: If we are going to look at classrooms and if we are going to parcel out bits of behavior, then we certainly had better run concurrent studies on it. What I see very often is either one approach or another. You can find people who are doing some counting, who are doing some rating, and who are doing some anecdotal stuff. Very rarely does anyone do the same thing on the same class.

I think before we move to the question of the validity of any given procedure, we are going to have to ask some questions about whether or not, for example, highly trained people observing teachers who would say quantitatively this one is better than that one, or about whether or not in the same case with the same teachers over a period of time with adequate repetition that this is represented either by direct recording of teachers' behavior or maybe even by this masking business where verbal interactions are regarded and the meanings masked out of them.

I think there are many levels of getting at this. I don't object to them. What I do object to is that usually they are done in isolation and are often characterized by an attempt to relate these many counts to, for example, changes of intelligence in children without in any way determining whether there is any concurrent validity to it.

DR. CALDWELL: You have lost me. What difference does it make?

Let me just make one comment. I don't think what you said about the studies that don't use more than one method is true. Dr. Weikert's report, as I summarized the study, was talking about the cognitive gains; but they have concurrent rates, and they have observations in the classroom.

Most people now who are doing any kind of evaluation of any sort of educational procedure try to use more than one assessment technique--that is, people will measure some change on a test, and everyone else focuses in on the I. Q. changes. Most people work at behavior changes in ratings, at highly quantitative descriptions, such as I was referring that you get from the approach.

I think it is fair to say that practically everybody now who is trying to evaluate educational programs uses procedures that give a different degree of magnification. What happens, though, is that in the reporting it is always honed down, and somehow most people seem to want to distill the I. Q. changes.

DR. GARFUNKEL: Would you say this is true of the evaluations of the teacher and of the classroom environment, too?

DR. CALDWELL: I don't think we are successful in evaluating total group functioning; but in most programs that have attempted to do the miniscule type of analysis that we are doing, some sort of rating procedure has been done simultaneously or, at least, on a small segment of the observations in order to be able to come up with some estimate of what this concurrent validity concept is. Basically, however, the notion of concurrent validity is irrelevant if we are interested in the relationship between the number of teacher collections and some behavioral variable on the part of the child. It doesn't matter what it means. What matters is that it occurred and that you can demonstrate it in association.

DR. GARFUNKEL: I think our difference here is an interesting one, because I think it is not that we disagree but that we represent different points of view.

I think also that this term educational research gets palmed around a lot. Perhaps only because someone is in a classroom counting teachers' behaviors it becomes educational research. I probably have as much or as little humpty-dumpty right to define this as anyone else. Nevertheless, when I see a discontinuity between the quality of teaching and the quality of the way it is investigated--the kind of approach that is used--and when I don't see any payoff in terms of what the teacher is going to get out of it, then, obviously, I am not interested in it because that is not my focus. Additionally, I am not interested in wholesale collections of bits of behavior which eventually will correlate with almost any kind of change in any kind of test you want to use.

I don't think this in any way speaks against people approaching both developmental and interactional factors in other ways, just as I guess one of the reasons for my bias is that as a teacher I wouldn't want people to impose a method on me. I would want to become a part of an evolving method.

It is just as simple as that, because this is my view of pedagogy of children. I don't see this imposition at the level of working with the teacher; I don't think that anything that a teacher does is justified by the ends that she may or may not get. I am forced to try and figure out what the quality is of what she does and how it is presented to her.

I think, too, that my most important point was this question of the product. In special education, we tend to get out into different kinds of orientations to work with children; and, because I have students placed in analytical settings, in mental health settings, and in straight educational settings, I just don't see that these describe the polarity of the situation.

I don't think that Murray Sidman, for example, as I have seen him work, represents a polarity from some of the people I have seen working in guidance clinics. I think there is a difference and more meaningful polarity which describes different approaches to children, so I am not so much interested in the product as in how this evolved.

It was a problem, and it was dealt with. I would like to know how it was dealt with and how it was solved. I don't think it is particularly exportable.

MR. RONALD WIEGERINK: Can you give an example of any type research model that you would recommend for preschool curriculum? Dr. Caldwell, for example, recommended comparing various types of preschool curriculums, and, apparently, this doesn't set very favorably with you. Would you provide an alternative direction for us?

DR. GARFUNKEL: I obviously believe that the critical variation is teacher variation. We run right back into the question which was asked, and which I did not answer about concepts used in measuring the teachers. My hesitation is that we have determined some scales which have evolved out of our direct work with teachers with films. These scales are an attempt to get at something in between.

We are trying to build up to a general rating of teachers, and we build up to it by asking questions about what they do and the way they do it, about the way or the extent to which they control materials or allow children to control materials.

DR. JAMES A. JONES: What do we do in spite of the teachers where, in many cases, we are not going to be able to change all of them because of tenure and that sort of thing? Maybe we have to look for something like Dr. Caldwell was talking about.

DR. GARFUNKEL: I don't dispute anyone's attempt to study any kind of variation. I am just questioning whether we are going to get meaningful variation from comparisons of methods.

DR. ROBERT CALFEE: To the extent that our society depends upon talented teachers, we are really at the mercy of environments. You would give minimal instruction to teachers, put them in the classroom, and wait for them to develop those tools or techniques which they can best use. All of a sudden, however, we might wake up tomorrow and find out that there are no teachers in our society doing a decent job. There is nothing as a society we can tell them or put in to supplant this?

DR. GARFUNKEL: Admittedly, I am skeptical about the ability of teacher training institutions to affect people that go through them. Studies of student teaching have been pretty negative in terms of trying to differentiate the effects of different kinds of training programs.

I obviously don't buy what you said, although it may seem that way.

DR. CALFEE: I am pushing you to the limit.

DR. GARFUNKEL: Going back to the question of what these concepts are, I would say that to the extent that we can relate them to quality of teaching in terms of estimation, I would necessarily have to go back to at least some involvement of people who would be experts in this field. Moreover, I would have to raise the question of whether people involved in teaching and teacher training in the preschool field are unable to make any judgments about who is a better teacher. Then, I would have to resort back and say, "No, there can't be a science of pedagogy, because there is no professionalism, no expertise, no consciousness of excellence."

I think that everything rests upon this. When we get this and then are able to break it down into components of behavior, it becomes the basis for training teachers. I think, however, that there has to be a distinct relationship between how we train them and what we expect them to do.

It is the old story of teaching democracy in an authoritarian way. We tell people we are going to be democratic--that they have to make their own choices, have to be creative, have to do this or that. I don't think we can do this with students who are training to be teachers the same way we can do it with children.

DR. CALFEE: It seems right there you are suggesting a method that you would want to communicate to teachers.

DR. GARFUNKEL: All right, I will fall into the trap.

DR. SMITH: We are more concerned with teaching than they are with learning. We are more concerned with schools and classrooms than we are with education.

I wonder if you can quote me any studies that show that the teacher, rather than the class or the intelligence of the children, is the crucial variable in learning.

DR. SANDRA ALEXANIAN: The National Grade One Release Study, which was a compilation of 27 individual studies, shows that.

DR. KATZ: The Office of Education studies show that next to the quality of peers, teacher quality is the most important.

DR. SMITH: How did they determine teacher quality?

DR. KATZ: I told you about that yesterday--by verbal ability.

DR. SMITH: Verbal intelligence?

DR. GORDON: That was particularly the case for youngsters in the South who might be presumed to be somewhat more educationally handicapped than youngsters in the North.

DR. LILIAN ZACH: I would suspect that that may come out by the fact that you can measure it a little bit better. We have a little more information about that than they do about curriculum.

But I am really confused by your point. You were very critical of the findings of the studies that get at bits of things, and yet you made the statement that the teacher is your deepest concern. Apparently, you are not interested in the child or the label or the curriculum. I don't see how you can talk about pedagogy in education by separating out any one of these three variables.

DR. GARFUNKEL: I will stand corrected. When I talk about teachers, I really mean a teacher functioning with a group of children. I don't mean the teacher's characteristics independent of the situation she is in.

DR. ZACH: So she must have some understanding of the child. . .

I think the problem is that when I came in you were talking about labels, and probably it is not really in the label but in the use of the label, that is, in not taking it into a kind of functional sphere.

The label may be very useful for certain purposes, because it tells us something about a child. The problem is that we don't take the label far enough.

I think this is the difficulty, not the label. Furthermore, I think it was a mistake to throw it out. The problem is to take it into a kind of functional sphere in terms of education, which is what we have failed to do.

DR. GARFUNKEL: The question you are raising is the problem of labeling the function of a knife which can be used constructively or destructively. This often comes up with the I. Q. The I. Q. can be misused or inferences can be drawn, but people argue that if it is misused by others it doesn't mean we take the whole thing and throw it out.

I was arguing specifically in terms of the diagnosis of children by noneducational people who give them labels which I consider to be inappropriate to what is being done with them. I don't think it is a question of a knife being misued; rather, I think it is an inappropriate implement. It is a steamshovel kind of thing.

DR. ZACH: My point is not that it is inappropriate but that it hasn't been taken far enough. We have the paper label and interpret or translate it to. . .

DR. GARFUNKEL: With the concept of brain injury, I don't think this is possible, and, with the concept of autism I don't think this is possible. I can run right down the other labels and jargon of special education and psychiatric and other kinds of clinics.

DR. ZACH: It is entirely possible, if you don't have a concrete approach to it. If you recognize that there is an overlap, that an autistic child and a brain injured child may need the same kind of a learning. . .

DR. GARFUNKEL: . . . If you can do that.

DR. ZACH: That is the problem.

SUMMARIZATION

Dr. Edmund W. Gordon
Yeshiva University

The several presentations that have been made at this conference have been very useful; nevertheless, I think we would all agree that there is yet a great deal to be done and a great deal to be wished for in research related to the disadvantaged and/or segregated.

In looking for the commonalities in these presentations, it seems to me that many people were calling for additional studies, making the point that our baseline data for these populations were not as good as they should be. Whether we were talking about language, desegregation, or preschool programs, a plea was made for additional studies directed at the nature and quality of function and the nature and quality of resources.

There was a repeated call for descriptive studies of language, of what goes on in classrooms and in homes, of response frequencies and patterns, and of experimental inputs. The need for comparative studies of curriculum, categories of learners, and interactions between these two things was also indicated. We were reminded that longitudinal studies are still the bench mark against which we compare good research that relates to the development of persons and that greater precision is required in our work if we are to study processes and/or status.

For a broader basis of measurement, we called for studies in natural settings, and I suspect that most of the references here have called our attention to the fact that we have given one-sided attention to problems of cognitive development, particularly as assessed by standard psychological tests.

Our attention has been focused upon the need for critical analysis and synthesis of available knowledge and practice--for considered and deliberate replication rather than for indiscriminate and ill-considered duplication of effort. Indeed, from the several leads that have been referred to specifically in the presentations, it seems that we could design a variety of research projects. Certainly, we could begin to group the many problems confronting us and arrive at programs of research related to the disadvantaged.

The objective of this conference, as well as of the other conferences held under the terms of the Project on Stimulation and Development of Research Related to the Education of the Disadvantaged and/or Segregated (U.S. Office of Education Contract #6-10-243), has been to involve people in programs and projects for the disadvantaged and, more important, to develop research strategies. And I suspect that we are as much in need of strategy in the design of programs as we are in the design of specific projects. One of the better ways of arriving at a strategy is to begin the conceptual model of tackling a problem or a group of problems one is concerned with.

At one of the early conferences held under this project, Dr. Edward Zigler of Yale University reminded us that learning involves at least three behavioral processes which he identified as basic cognitive processes, affective processes, and achievement processes. I interpret the latter category as including content and skills mastery. Obviously, these three categories of behavior are interrelated, but they may have differential plasticity. It is not safe to assume that each is equally malleable at all stages of development.

Dr. Zigler suggests that the cognitive processes may be the least malleable, and yet this is the area in which most of our work with disadvantaged children has been focused. Moreover, not only does the cognitive area appear to be the least plastic category of behavioral processes but also the least flexible and the least subject to change. Dr. Zigler suggests that the affective area (motivation, attitude, etc.) may be more malleable and that it may even be through the manipulation of motivation that we get change in cognitive development.

Certainly, we know from some of the work with illiterate young adults in the U.S. Army that a fair amount of change can be effected in content and skills mastery. It may be that through manipulation of achievement, i.e., specific skills mastery, we are able to effect qualitative changes in cognitive function. Additionally, it is conceivable that a shift from a frontal attack on the modification of cognitive processes may be indicated not only because of Zigler's assumed greater malleability of effective and achievement processes but also because these other two categories of function may, in fact, provide a greater influence on cognitive function than a frontal attack on them.

In pursuit of further research in this area, I would suggest that we give more attention to the development of conceptual models that might guide this work, and, for me, the model that grows out of Dr. Zigler's thinking is one that I will want to give a great deal of thought to. I am not as certain, however, as Dr. Zigler that we know how to provide in school the greatest amount of influence upon the modification of affective behavior, aspirations, motivations, etc. It is quite possible that these aspects of behavior are more significantly influenced by things that happen outside of the school in the broader community.

This leads to another kind of concern relevant to the development of strategy. As developmental or educational psychologists, educationists, or pedagogues of one sort or another, we ought to place our work in a broader social-political context. Increasingly, I am convinced that we have been wrong in placing so much stress upon particular aspects of educational achievement as a route out of poverty. In the last chapter of my book, Compensatory Education for the Disadvantaged, coauthored with Dr. Doxey A. Wilkerson, some goals of education are set forth as appropriate not only for disadvantaged children but for all youngsters. I still hold to these goals because I think that in the emerging society they are going to be important. Nevertheless, I think that if we are really concerned with helping people move into the mainstream of society, we must give some consideration to some of the routes that others have taken--and they have not always been primarily related to upgrading education. Indeed, I suspect that the upgrading of education has been a product of other kinds of movements which have had, for the most part, social-political-economic foci.

All this is not to demean education. I think it is and will be tremendously important, but I suspect that the real disadvantaged people in the year 2000 will be those individuals whose educational experiences have rendered them not incapable of somehow gaining money but incapable of establishing meaningful relationships with other people, incapable of appreciating and relating to people, ideas, the world of nature, and the world of aesthetics.

I would still want to hold onto what I regard as appropriate goals for education; however, I do not think that education defined in that way should be offered to the poor as the major or sole vehicle for "making it" in this society. Quality education equal to the excellent academic high school curriculum, I feel, can and must be provided for practically all of our children because it is humanizing and liberating--not because it is the solution to poverty.

I think that people on the political and social action front who are now demanding the restructuring of our society, the reordering of our economy, and the reallocation of our national resources from the support of military action abroad to social reconstruction at home are probably pursuing a more correct strategy. Human attitudes and behaviors change as a result of didactic experience. They probably change more significantly and rapidly in the context of opportunities for meaningful participation in matters that have relevance for our lives. It may be that it is in the arena of social interaction and political participation that we will find levers for the most effective education of the disadvantaged.

I appreciate yourhaving come to Yeshiva University to be with us during this conference. I hope that you will find participation in the post-conference workshops during the next three days both satisfying and stimulating, that you will have some fun in New York, and that you will go back to your respective institutions to continue and to improve upon the good work I hope you have started.

APPENDIX

POST-CONFERENCE RESEARCH TRAINING WORKSHOPS

June 28-30, 1967

1. How has Head Start affected family life? Have the new child-rearing techniques learned by the mother caused friction between the parents?

2. What happens when a community service agency offers the mother (who is more employable) a job and the father remains unemployed? (At this point, it was suggested that men be trained to work as family workers or family assistants.)

3. Does Head Start give the child a negative view point of himself? (A quotation from a study on Head Start was cited which implied that Head Start lets the child know that he is disadvantaged at 4 years of age when he used to find out at 10 years of age.)

4. Does parental involvement in Head Start affect parents' attitudes toward school?

5. Does parental involvement effect participation in the PTA? (The group felt that if parental involvement did not lead to long-range participation in school and other community activities it was not really doing what it was supposed to do. Parental involvement in a Head Start program was not considered an end in itself.)

The discussion was then focused on surveys and the use, administration, and interpretation of interview. Many of the participants in the workshop had had experience with interviewers before and had found that it is best to make an appointment with them. It was felt that the results of interview and surveys should be reported to those who participated.

Dr. Jones outlined some factors that are important in the interview situation:

1. Summertime is not a good time to perform a survey.

2. In some cases, interviewers who can speak several languages are needed.

3. In low income areas, the interviewer can be helpful by informing people of the services that are available to them.

4. Interviewers should be selected with the public to be studied in mind--in some cases, mothers are resistant to young male interviewers.

5. The presence of someone else while the interview is going on can have a negative effect.

6. The facts that are given during the interview should be checked for their validity.

7. It is best to have a training session for the interviewers before the survey begins.

8. If a tape recorder is going to be used, permission should be obtained.

Those in the group who had administered very long questionnaires and interviews expressed difficulty in analyzing their data. Dr. Jones made reference to some work being done by Dr. Phil Stone at Harvard University where computers are used in the analysis of interviews.

The question was brought up as to how one knows when he has analyzed the materials far enough. Dr. Jones pointed out that what one is looking for usually determines the depth of the analysis.

BIO-SOCIAL FACTORS IN THE DEVELOPMENT OF DISADVANTAGED CHILDREN

Workshop Conducted by Dr. Gerald S. Lesser, Harvard University

Two general topic areas shaped discussion in this workshop. The first focused upon research projects in which workshop participants were involved and upon related research problems. The second involved consideration of the moral implications and consequences of educational goals.

Discussion was led off by Dr. Jordan A. Tannenbaum who is associated with the Children's Center at Syracuse University. Dr. Tannenbaum gave an overview of the Children's Center project and then commented on the use of the Caldwell-Soule Preschool Inventory test.

The inventory was described as being primarily a verbal test, which supports the educational status quo. That is, it was pointed out, it has the goal of bringing Negro children up to a white performance level. Moreover, the use of the test implies that this is what is needed. This aspect of the test, it was suggested, raises some important objections to the moral implications not only of the Preschool Inventory but of tests in general.

Additional problems considered in relation to the use of the Preschool Inventory were twofold. First, the examiner's aim in testing of eliciting representative performance was found to contrast sharply with the teacher's task of maximizing the performance of students. Secondly, the very purpose of the test posed several questions:

1. Is the Preschool Inventory a "culture ubiquitous" test? Does it test what the subject knows?

2. Does the Preschool Inventory test the subject's information (content) or his use of information (problem-solving process)?

3. What are the effects of examiner differences on subject responses to items on the Preschool Inventory?

Following this discussion, the issue of moral implications was again brought up for comment. Briefly, Dr. Shuell Jones, Director of the Head Start Research and Evaluation Center at Tulane University, commented on an ongoing project which involves the investigation (analysis and change) of basic readers. Implicit in the investigation is the attempt to make Negroes like whites by studying and diminishing differences influenced by basic readers in free associations, which yield a measure of cognitive distance.

Dr. Jones' comments provided the transition to an extensive discussion of the moral implications and consequences of educational goals. The first issue to be raised dealt with the strategy of intervention. The basis for intervention was cited as the empirical observation that cumulative deficit does exist. It was pointed out, nevertheless, that the priorities for intervention depend upon a definition of what is wrong. Several rationales for intervention were then discussed.

Turning to the more basic issue at hand, the group launched into a discussion of the educational goals of American society. The numerous possible goals, ranging from emphasis upon verbal ability to modifying the environment or running a revolution, were described as presenting questions of social philosophy that demand definition. Not only were the goals considered unclear but generally inadequate. The indicated need, it was agreed, was for delineation of educational objectives and for implementation of educational systems which could effectively achieve them. In the meantime, whether or not psychologists, for example, could move beyond the "establishment" goals in their investigations and innovations was a question that, having been largely untested, remained unanswered.

With reference to this latter point, Dr. Lesser briefly reviewed the implications for policy of a study which investigated the effects of social class and ethnic group membership upon the level and pattern of mental abilities. (This study, conducted by Lesser, Fifer, and Clark, was reported in *Monographs of the Society for Research in Child Development,* 30:4 (1965), as "Mental Abilities of Children from Different Social Class and Cultural Groups.")

The major finding of the study indicated that distinct patterns of mental abilities do exist for ethnic groups, independent of social class. Significantly, Dr. Lesser argued, this represents a major challenge to the Coleman Report's "equal footing" argument which proposes equal educational opportunity for equal development.

In addition to working for equalization of educational opportunity, Dr. Lesser maintained: 1, that we must remove the effects of social class upon *level* of achievement; and, 2, that we must maximize the development of particular mental abilities, *accentuating the diverse contributions of different ethnic groups and favoring pluralism.*

In bringing the workshop discussion to a close, Dr. Lesser emphasized that equalization and increased diversity in education and in society were goals which were not incompatible.

LANGUAGE DEVELOPMENT IN DISADVANTAGED CHILDREN

Workshop Conducted by Dr. Stanley Sapon, University of Rochester

Dr. Sapon spoke on contingency management as related to language development and verbal behavior. The theoretical framework for his comments was Skinner's "operant conditioning." Most of the discussions centered around his experimental nursery school in Rochester, New York.

Emphasized throughout the workshop was the idea of a functional rather than a formal approach to the study of verbal behavior. (The person who is functionally advantaged is one whose verbal behavior can influence or control the behavior of others.) Sapon's model is a three term contingency model. The factors are the controlling stimulus, the behavioral act, and the consequences of the behavior.

Various schools in psychology maintain that the analysis of verbal behavior (spoken language) is equivalent to the evaluation of the individual's perception of the controlling stimulus and his response. This notion was rejected by Dr. Sapon. What can be said is that some verbal behavior is effective in controlling the environment while other acts of verbal behavior are not. Dr. Sapon also rejected the notion that the teacher presents language in a fragmented form and that the child then synthesizes the material. According to Sapon, this view assumes that the child has some innate mechanism which synthesizes and structures language. There is, he feels, little evidence to support this view.

In terms of methodology, Dr. Sapon argued that we cannot demand from a child behavior which he has not learned or which he is not capable of. There are great individual differences between children, and each child must guide the teacher (rather than the teacher's being the pace setter).

Of great importance is the fact that the effective consequences (in Sapon's case, the reward) which will strengthen the desired behavior must be tailored to the individual child. Thus, if the child doesn't respond, or responds inappropriately, it is because the teacher has not found the most effective consequence--not because the child is "dull" or was brought up "incorrectly" by his parents.

Dr. Sapon questioned the validity of extensive quantification in the measurement of verbal behavior. He argued that quantification is often not as important as measurements involving quality descriptions. The problem is twofold. First, we are really unsure of what and how to measure. Second, quality descriptions, given in anecdotal form, are often viewed as unscientific.

Finally, in terms of testing, Sapon advocated a reevaluation of the basic questions of why we test, what we test, and how we test. He feels that the first question is largely unanswered, that the second is often irrelevant to the problem at hand, and that the third often leads to threatening and aversive situations. In other words, the child is put into a test situation which is meant to appraise his functioning. However, the test situation and the real life situation most often have little in common. Thus, the child is frequently bewildered and threatened.

RESEARCH MODELS FROM BEHAVIORAL ANALYSIS AND CONTINGENCY MANAGEMENT

Workshop Conducted by Dr. Ronald Holzschuh, University of Kansas Medical Center

Dr. Holzschuh opened the workshop by outlining the broad strategy of the group working with Dr. Ogden R. Lindsley at the University of Kansas Medical Center. Their aim is to create precision in teaching, and the broad strategy they have adopted is to act as advisors rather than as managers. Thus, the discussions focused upon quantification and a wide variety of applications in behavioral management as they relate to training education students, parents, teachers, etc. The rationale of the Kansas group is straightforward: If we wish to bring about the changes in schools which will be necessary to create precision teaching, we must put our energies into developing effective managers in large numbers. Given the size of the task and the limits of training resources, one hour spent training 10 parents or 10 teachers to effectively accomplish educational goals yields quantitatively superior results to spending the same amount of time training 10 educational researchers or 10 operant conditioners. Hence, a college of education is the setting used for their program.

The bias of the Kansas group is toward consequences as the variable of central interest. They have found that a focus upon consequences of behavior has enabled them to successfully teach management principles to an almost endless variety of students--parents, teachers, boy-friends, mentally retarded children, etc. Their broad strategy is to act as advisors, and their role is to help find accelerating and decelerating events (consequences) for managers and to perform a service function which, in itself, often changes behavior consequences that, they maintain, are there anyway. The task of the behavioral manager is to find and alter them in order to produce desired changes in the protégé.

The emphasis is upon broad applicability and practicality. For example, in working with classroom teachers, the following rules are rigidly observed: 1, no devices or new things are used in the classroom which cost more than \$30.00; 2, all visitors to classrooms are put to work recording behavior--this procedure provides rate samples on performance of individual children which are of use to the teacher; and, 3, parents are required to attend from time to time and do the same. Teachers also record performance, and it has been found that they can reliably record the behaviors of 40 children at the same time.

In the classroom setting, as soon as it is possible, maximum mileage is achieved through having the children record their own behavior. Another rule is that when behavioral control has been established for a child, the management is turned over to the child. The adult manager, of course, continues for a time to record the child's performance in order to test the adequacy of his self-management.

The Kansas group maintains that one of the major reasons why it is difficult to get innovation into the schools is that the educational structure (including researchers) works in a reverse hierarchy. The hierarchy must have the child at the top, if any innovation is to prove effective. They further maintain that the route to go in changing schools is not through the establishment but through the parents.

A great deal of discussion centered around the question of quality versus quantity. The question of what to quantify carried over into Dr. Stanley Sapon's workshop on Language Development in Disadvantaged Children which this group joined on the second day. Dr. Holzschuh's response to the question was that we must start where we can, record carefully, and continue to refine the definition of the target behavior until we get the information we want.

Dr. Holzschuh also placed a great deal of stress upon the importance of self-selected problems and self-selected consequences. The Kansas group account for their success largely in terms of this orientation. The guidelines, again, are straightforward: Teachers best know their problems and children will best define what works with them. If a researcher fails to get a teacher to apply something new, he must assume it is his own fault.

With regard to courses in educational psychology, the Kansas courses are now principally "lab" courses. The whole assignment is to change four behaviors--two self, two other. The structure of the educational establishment is studied with a view toward change. The goal is to make teachers and administrators more effective in what they want to do. A longer-range goal is to find ways of changing what they want to do.

They have suggested that curriculum effectiveness be measured by improvement in rate of desirable behaviors for individual children, and that the same measure be used as the most meaningful record of a child's progress in school.

The various questions posed and the ensuing discussions led to the formulation of a number of areas of research interest, cast within the framework of behavioral management, which included: 1, recording as a variable--differential effects of hidden, private, confidential, and public recording of behavior; 2, control as a variable--the differential effects of self-imposed versus other-imposed consequences; 3, feedback as a variable--including a discussion of the use of false feedback as a form of therapy; 4, a critical examination of contingent versus noncontingent worlds--what each does for and to people; and, 5, an exploration of the diagnostic possibilities of rate--"class character" plotted as a function of total rate versus rate correct.

Dr. Holzschuh distributed "modification summary sheets," which are case records currently being filled out by all managers associated with the Kansas group. They have begun a data bank of case histories of behavior modification and encourage all individuals engaged in behavior modifications to record on these forms and submit them to the group. In return, the files are open for the use of all interested individuals.

One other item of interest was a functional definition of "symptom substitution":

1. We can't assume symptom substitution without base rates on both "symptoms."

2. If we can demonstrate that by manipulation of one behavior we directly manipulate another in a reverse direction, we have a case of real symptom substitution.

The alternative exploration (and the likely result) is that as the original behavior is removed, behaviors with which it is incompatible will become available. For example, a man stops smoking in the car and begins to snap his fingers in time to the music on the radio.

INTERVENTION IN THE EARLY DEVELOPMENT AND EDUCATION OF DISADVANTAGED CHILDREN

Workshop Conducted by Dr. Halbert Robinson, University of North Carolina

On the morning of the first session, Dr. Robinson briefly outlined his background and the work in which he is currently engaged.. Members of the group then introduced themselves and discussed their subjects. Based upon this, Dr. Robinson outlined several major issues in the planning and execution of intervention programs for the disadvantaged which, it was decided, would be the primary topic of the workshop.

Dr. Robinson is currently head of the Chapel Hill Developmental Center at the University of North Carolina which has two branches: 1, a psycho-physiologically oriented center for biological and pathological factors; and, 2, a behaviorally oriented center for normal development.

The latter branch studies 240 children longintudinally from birth through elementary school. The children are seen in eight hour days in a day center. The center offers a very comprehensive enrichment program focusing simultaneously on many variables. Dr. Robinson pointed out that such a comprehensive program introduces the major research problem of how to isolate what produced the desired result--that is, was it the language program, the nutrition program, etc.

Dr. Robinson noted the following general findings with respect to the nature and effects of intervention:

1. Intervention with an unstructured program does not produce as great an increase in I. Q. as intervention with a structured program.

2. While there are sharp initial increases in I. Q. which are greater in the experimental group in an intervention program, declines are noted in the experimental group; and there are longer significant differences between them and the control subjects.

Related to these findings, Dr. Robinson pointed out that there are relevant observations to be made regarding research in this area:

1. The second finding stresses the fact that research in this area would benefit from adopting a longitudinal approach. He stressed the serious need for careful follow-up studies of the long-term effects of intervention programs.

2. Research must go beyond showing that intervention can increase competence in any one particular area. Instead, it requires that we determine what type of inputs can produce long-term cumulative effects for the individual.

Major issues in "intervention" research included: 1, nature of the population--the problem of differences in the two populations (middle-class and "disadvantaged") and how to put them on a single continuum; 2, problems of goals--personality, social, cognitive, and in what combination; 3, type of curriculum; 4, language (bilingualism); 5, single variable versus comprehensive multivariate research; 6, importance of longitudinal research and the need for careful follow-through; and, 7, funding. (Because government funds in this area are lacking, many of the programs are fragmented. Even if this condition did not prevail, the question of where we should concentrate our major resources arises.)

The question of the goals of education for the disadvantaged and the related issue of population differences between middle- and lower-class children were also examined. The major point made in this discussion was that goals for intervention programs for the disadvantaged must be established empirically. Goals are intimately tied to the question of population differences. Dr. Robinson's center, theoretically founded on a model of individual differences in development, attempts to eliminate population differences by providing the disadvantaged child with the same environmental encounters his middle-class counterparts would receive in their homes.

This theory raises the question of how the parents of disadvantaged children will react to the treatment their children are receiving at the center. This, however, can only be tested empirically. In general, it was found that while lower-class mothers could be "sold" on certain features of the center, it was hard to change their basic attitudes and values regarding child-rearing practices, the nature of their interactions with their children, etc. Furthermore, there is the risk of alienating and antagonizing lower-class parents and of fostering in them a feeling of their own inadequacy as compared with the magical powers of the day center staff.

Dr. Robinson reiterated the problem of establishing long-range goals for programs. He pointed out that in his program he has been pragmatic in his approach, focusing on specific questions or issues and testing them out empirically.

In dealing with children in any kind of program, we have to decide how comprehensive we are going to be. How little can we do, and still have a measurable effect or impact on the child? Head Start, for example, is a minimal program--according to Dr. Robinson, it is too minimal to produce a measurable outcome. Eight weeks for a disadvantaged child who is five years of age, even under the most ideal situation, simply is not a sufficient length of time to have an impact, to produce a product. Comprehensive programs with extensive followups are required to establish what is required to effect long-term and lasting changes in an organism as complex as the human child. This is social action research, and it demands positive results. The major problem, as Dr. Robinson sees it, is to determine "what are the minimum inputs or type of program needed to produce such a measurable impact."

Dr. Robinson expressed the concern that unless long-term positive results are developed soon, the impetus developed since 1964 with all of the Great Society legislation will be in vain. If the goals of the Great Society, maximization of everyone's potential are not attained, he fears that there will be a relapse to genetic predeterminism and to a platonic conception of social organization. In short, he feels that we have the resources to produce desired results, but that our present programs are failing and that something must be done before it is too late. He feels an essential first step on this road is to determine what are the minimum time requirements of a program to produce significant change. In this light, he stresses the need for longitudinal research studies with extensive follow-up studies.

Data from the Perry study were then presented. This study shows differences in the cognitive, achievement, and social-emotional areas for experimental and control groups after a one-year intervention program. It was felt that such a study is important because it shows cumulative long-term effects.

Having noted these data, the group was led toward a discussion of the broad, the philosophical, but crucial, issue of the evaluation of programs and the ethical responsibility concerning the reporting of findings. In this respect, Dr. Robinson stressed the need for reporting and carefully interpreting findings and for cautiously disseminating them to an unsophisticated group.

The discussion that followed focused on the daily activity schedule at Dr. Robinson's center. (A unique feature of his setup is heterogeneous age grouping.) At the end of the discussion, this question was raised: With such a comprehensive program, could Dr. Robinson possibly know how to evaluate a particular aspect of his program or what part of his program was "responsible" for a hypothetically postulated improvement in the children?

This gave Dr. Robinson an opportunity to reiterate a point he made earlier--that intervention can work, that current programs (for example, Head Start) are inadequate, and that the future for such social action will be very bleak if the current failures continue over the next five years. Therefore, the single most important challenge facing workers in this area is to show, beyond the shadow of a doubt, that planned intervention really works and that it really can bring about practically significant differences. Success is of primary importance, and Dr. Robinson feels that only a comprehensive program can produce it. Then and only then should we focus on determining what aspects of a particular program were "responsible" for the result.

In concluding the workshop, Dr. Robinson tried to indicate the present state of affairs in the several areas discussed and where he thinks we should be heading.

Today, preschool intervention programs are receiving a great deal of attention. The reaction to the negative results of Head Start, however, should encourage us to improve it rather than give it up. Dr. Robinson feels that child attendance at Head Start programs could be increased if the programs were transformed into day care centers.

In urban areas, he pointed out, a new housing law has been passed which requires that all housing developments include physical facilities for day care centers, community action, etc. Such programs offer great potential. In government circles, it is now recognized that city planning, housing, etc. must focus on providing such facilities for preschool children.

To date, we have been against putting preschool children in group centers. Over the next decade, however, Dr. Robinson feels there will be a complete reversal and that putting youngsters from two to five years of age in such day care centers will be a tremendous change or revolution in the role of the family and, specifically, in the role of the mother.

Moreover, Dr. Robinson is strongly in favor of establishing from 12 to 15 planned preschool intervention centers around the country and of maximizing intercommunication between workers at these centers. Such action would facilitate the more rapid solution of many technical and procedural problems encountered at isolated centers in operation and would also coordinate research.

Regarding the nature of work done at these centers, Dr. Robinson himself has strong ties with government agencies working in this area. He noted that they may be subdivided into two functions, one concentrating on social action and "applications" and the other concentrating primarily on research.

With respect to the aims of research on intervention, Dr. Robinson cites the following important functions: 1, the development of a very general, comprehensive multivariate enrichment program; 2, the collection of masses of specific data through the use of many tests; and, 3, the latitude, within the context of this "general" program, to include short-term hypothetics--deductive types of experiments to test the efficacy of specific types or programs of intervention in a particular area.

RESEARCH MODELS FROM SPECIAL EDUCATION AND REHABILITATION

Workshop Conducted by Dr. Frank Garfunkel, Boston University

An unfinished experiment at the University of Michigan to examine different teaching styles and to measure their effectiveness identified five types: 1, "expert"; 2, "formal authority"; 3, "facilitator"; 4, "ego ideal"; and, 5, "social ideal." This breakdown was established from the ratings of students in a freshmen psychology class, and teachers were studied from tapes of their classes. Teachers were rated within each of those categories and on an overall scale. Out of the discussion of this model, several issues were raised. First, there is a need for a realignment of ideas about teaching styles that cuts across traditional classifications. Secondly, if one recognizes different teaching styles, one should also accept different learning styles among children. Finally, any discussion of the effectiveness of a particular teaching style must consider the nature of the students being taught, the subject matter, and the context in which the teaching is being carried on.

An experiment was conducted at Boston University to determine the influence of the teaching styles of five different instructors upon the discussions of a group of mentally retarded children. The success of a teaching style was measured by the amount of interaction among the students when they discussed affective issues. (The discussion of substantive issues was considered less important.) A teaching style was also considered successful if it stimulated the students to relate the functioning of the classroom they had observed to the functioning of their own seminar. Essentially descriptive, the study did not arrive at any good criteria for which of the teaching styles was most effective.

Out of the discussion of this study came an exchange about effective ways to train teachers. Dr. Garfunkel maintained that the best way is to have them observe classrooms after having received instructions to look for certain specific behaviors. He felt that this was not only superior to student teaching but could open greater research possibilities. Research training _must_ be carried on simultaneously.

A Research Model for a Family Observation Study

An observer goes to a family with a checklist against which he measures the adequacy of the family in order to help the child in school. The observer is told to be value oriented; and when he presents his report, he is asked first to give his subjective reactions which are then critically examined. The study has found that there is a high correlation between the observer's subjective and objective observations and the academic performance of the child.

Some General Issues In Conducting Research

Research on Children

It is important to recognize that a researcher's findings are always based on his particular sample and cannot be loosely generalized to apply to all children. Before any generalizations are made, it is important to examine those not included in the original sample. In general, samples of children in many studies have been deficient because too much research uses only school children as subjects. But, for instance, in doing research on deprivation, those not in school are as important as subjects because they are most seriously deprived. It is, however, cheaper and less time consuming to use school children as subjects.

Change in a child does not have to be measured merely as change in performance of skills but can be measured as changes in behavior (for example, aggressiveness and obedience).

In evaluating intervention efforts, the nature of the child, the teacher, and the context are important to consider.

Evaluations of intervention efforts that consider only developmental changes in children (especially in normal children) do not indicate clearly enough the effect of the teacher or of the method, because the children are studied at times when change is occurring naturally. In general, it would be more fruitful to study children who are not developing normally or to study them at times when change is not occurring naturally so that the effectiveness of various intervention methods could be made clearer.

Measuring Teacher Effectiveness

It is difficult to translate or abstract a teaching experience when trying to describe it, but this feedback is essential in conducting research. Possibly, the best way to perceive a teaching experience is on tapes or films, although this is quite costly. However, it is important for the affective components of the teaching situation to be preserved for study. In this case, Dr. Garfunkel has no faith in the observer's reaction or explanation of a teaching experience.

In studying teacher effectiveness, there should be great variability in the sample. A heterogeneous population is necessary so that there will be a wide enough distribution of teachers to abstract differences. Dr. Garfunkel noted that in the case of a homogeneous population the observer's reactions become more important than in the study of a heterogenous group.

It is possible to examine teacher effectiveness by a self-profile and by the evaluations of observers and possibly students and then to find something characteristic in the high or low correlations of the evaluations. There may be, for example, a constantcy in the teacher's perception of his own success and his student's perception of it.

Data Collection

Data should be collected with an idea to be studied in mind. Having data is not necessarily a prerequisite to making a discovery.

Theoretical Issues in Conducting Research

Dr. Garfunkel felt that a strictly behavioral approach to research on teaching is limited because it considers only what is observable or measurable in contrast to a more clinical approach which allows for judgement and interpretation of behavior that cannot be measured. Behavioral research deals with more precise data, but the more minute the data the less wide its application. With less refined but more comprehensive data, the application can be more universal. Although behavioral research has been successful in finding ways for teachers to receive immediate feedback in the classroom and in perfecting some measures for evaluating teacher effectiveness, an exclusively behavioral approach could cause research to become fixed to only what can be measured. The question must always be asked whether there is in a research technique anything which inhibits the asking of questions other than what the particular research can answer or precludes dealing with other elements in the situation being researched. A good research method is integrated so that it can deal with all types of behaviors concurrently--those that can be measured and those that cannot.

"Pure" Versus "Action" Research

There is a marked contrast between research carried on for the sake of advancing knowledge and research conducted to bring about large-scale change. Action research has built-in evaluation for continuing action rather than for determining knowledge outside of the action, especially since such research deals with large segments of behavior that are difficult to replicate. There is the persistent question whether doing one kind of research blunts the opportunities for conducting the other. For instance, in the case of action research, the experimenter uses less controls because his interest is in bringing about broad social change. In pure research, the controls can be more precise and sophisticated because the study is carried on on a more limited subject. To put it another way, in one type of research the situation is glorified, in the other the controls are.

The discussion in the workshop then turned to forming a definition of mental retardation. Dr. Garfunkel felt that it was an inability to function socially and/or psychologically. The mention of social functioning led into the old question of the hereditary and environmental aspects of intelligence. Dr. Garfunkel said that for the purpose of studying change in intelligence you must conclude that intelligence is controllable. If you work on this assumption, then you must think in terms of a strong environmental determinant. Additionally, he pointed out that there are two ways of viewing mental retardation: 1, as a condition; or, 2, as a disease. If it is viewed as a disease, however, it should be thought to be curable.

The group concluded that it was not useful to think in terms of retardation as related to social class because social class is influenced by many factors--education, income, housing, and jobs. Within a social class, there is another source of variation--the family and the individual.

The discussion then dealt with studies on preschool children who were tested to determine retardation; very little, however, was found. On the other hand, when these same children were tested at the age of six or seven, there were many incidents of retardation. Dr. Garfunkel pointed out the continuity experiment in which the hypothesis was that disturbed adults were probably disturbed children. When this hypothesis was tested, it was refuted. This study seemed to support the environmental determinant theory of intelligence.

In conclusion, the discussion focused on the research aspect. Dr. Garfunkel felt that we should forget about studying the differences between groups (for example, between boys and girls, white and Negro, etc.) Instead, we should concentrate on the variable under consideration. The group felt that one cannot study a variable apart from the relationship of this variable to groups without getting a distorted picture.